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*Lithotomia Douglassiana:*  
OR,  
A New METHOD  
OF  
Cutting for the STONE;

FIRST PRACTISED BY

*John Douglas* Surgeon, F. R. S.

AND

LYTHOTOMIST to the INFIRMARY at *Westminster*:

TO WHICH IS ADDED,

What has been written by the most Judicious ROSSETUS,  
and the learned PIETREUS, on the same Subject.

Illustrated with several COPPER PLATES.

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*Citò, tutò, jucundè.*

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L O N D O N:

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To the HONOURABLE, REVEREND, and WORTHY, the  
GENTLEMEN and CLERGY,  
TRUSTEES of the INFIRMARY,

In PETTY FRANCE *WESTMINSTER*:

TO

Dr. *Alexander Stewart* }  
AND } PHYSICIANS:  
Dr. *William Wasey* }

*Ambrose Dickens* }  
AND } ESQUIRES,  
*Claudius Amyand* }

Serjeant SURGEONS to His MAJESTY, and Principal  
SURGEONS to the said HOSPITAL,

THIS  
T R E A T I S E

Is humbly DEDICATED by,

GENTLEMEN,

*Your most Obedient*

*and Obliged*

*humble Servant,*

Jo. Douglas.



## ADVERTISEMENT.

Next Month will begin

**A** Course of *Anatomy, Chirurgical Operations, and Bandages* (according to my printed *Syllabus*) by the Author, at his House in *Fetter-Lane*.

Oct. 31. 1722.







# *Lithotomia Douglassiana: &c.*



## INTRODUCTION.



It is universally allowed, that amongst all the Diseases with which Mankind are afflicted, there is none more terrible than the *Stone* in the *Bladder*; and amongst all the Chirurgical Operations now in Use, there are none so painful, dangerous, and uncertain, as the common Operations which are made in order to cure it. Therefore any Improvement of this most dangerous, though common Operation, cannot but be gratefully received by all those who have the Misfortune to be troubled with this

B

cruel



cruel Disease, as also by all Lovers and Encouragers of useful Discoveries.



## S E C T. I.

### *Diagnostic Signs of the Stone in the Bladder.*

**T**H E Necessity of being certain what a Person ails in all Cases as well as the present, before we propose the Method of Cure, is very well expressed by the excellent *Hildanus*, in the following Words.

*Non abs re, gravique Causa, divinus ac celeberrimus ille Chirurgorum parens Hippocrates, Lib. de Arte, sic scriptum reliquit. Chirurgus si sufficerit ad cognoscendum, sufficit quoque ad sanandum. Quibus Verbis Hippocrates solertes quoslibet Chirurgos hortatur, ut ante omnia summum studium & diligentiam, ad consequendam exactam & accuratam morbi cognitionem adhibeant priusquam de instituenda ipsius curatione quicquam intendant aut cogitent. Ac sane, si aliter procedat Chirurgus, tardè, si unquam, optatum scopum attingere, ægrumque pristinae suæ Valetudini restituere poterit.*

“ It is not without Reason, and sufficient Cause, that  
 “ the divine, and most celebrated Father in Chirurgery,  
 “ *Hippocrates, Lib. de Arte*, has thus left it upon Record:  
 “ If a Surgeon is able to find out, he will also be able to  
 “ cure



“ cure the Disease, by which Expression *Hippocrates*  
 “ exhorts every honest and industrious Surgeon, that he  
 “ would always endeavour, with the utmost Care and  
 “ Diligence, to acquire a perfect and exact Knowledge  
 “ of the Distemper, before he proposes, or so much as  
 “ thinks of setting about the Cure. And certainly, if  
 “ a Surgeon goes otherwise to Work, he will very rare-  
 “ ly, if ever, succeed.

The Diagnostick Signs of the *Stone* in the *Bladder*,  
 are of two Sorts; *viz.* Those they call common or  
 equivocal, because they may proceed from several  
 other Causes besides the *Stone*: And those that are  
 proper or univocal, because they can only proceed from  
 the *Stone*.

*The Equivocal Signs are,*

1. A great Pain and Difficulty in making Water,  
 which is encreased or diminished according to the Posi-  
 tion and Figure of the *Stone*.
2. A Weight on the *Perinæum* or *Rectum*, which is  
 more or less according to the Bigness of the *Stone*.
3. A frequent Inclination, without Ability, to  
 make Water, and if any passes it is by Drops, and with  
 great Pain.
4. They frequently make bloody Water.
5. They have often involuntary Erections.



6. A Pain in the Glans and *Frænum*, which they endeavour to ease by pulling and handling it.

7. Some, when they make Water, cross their Legs, bend their Heads towards the Ground, and with their Hands press on their Belly, &c.

8. Some are troubled with a *Prolapsus Ani*.

9. Some have a *Tenesmus*.

10. The Stream of Urine is often stopt of a sudden, by the Stone falling on the Passage.

11. They cannot ride in a Coach or on Horse-back without great Pain.

12. They are relieved by no Medicines, but very often made worse.

These, or some of them, make us first suspect that a Person is troubled with the *Stone*, nevertheless, we cannot depend upon them, because they also happen in Inflammations, Ulcers, and Excrescences of the *Bladder* or *Urethra*, and therefore we must have recourse to that which is infallible, *viz.* the *Catheter*.

#### *How to search with the Catheter.*

There is such Difficulty in passing the *Catheter* in Males of all Sizes, (occasion'd by the Length and Figure of the *Urethra*, Obstructions in the Passage, such as the *Verumontanum*, Excrescences, preternatural Straitness, Inflammation of the Sphincter, bad Position of the Body, &c.) that I think it cannot be taught by Words, and ought never to be attempted,



attempted, but by those who have a perfect Idea of the natural Figure and Structure of the Parts, and who have been well instructed how to manage the Instrument.

There is not only great Art and Dexterity required to pass the *Catheter*, but also to discover the *Stone* (especially when small) after it is passed, which is only to be acquired by good Instructions and frequent Practice.

As the passing the *Catheter* in Males is so difficult that it cannot be expressed; so the passing of it in Females is so easy it is not worth while to describe it.

The *Stone* being discovered by the *Catheter*, there is no other Method to get rid of it yet known, but by Cutting, whatever Impostors pretend, or credulous People believe.

We ought not only to be satisfied of the Existence of a *Stone* in the *Bladder*, but also of its Bigness and Figure; (because it will enable us to judge how big the Wound in the *Bladder* ought to be made) both which are discovered by introducing our Fingers into the *Anus* or *Vagina*, and using them as directed in Cutting on the Gripe.





## S E C T. II.

*Whether the Stone ever adheres to the Bladder, as is supposed.*

**T**HE dreadful Idea of the *Stone's* adhering to the *Bladder*, does so disturb and fright some Patients, that they rather choose to die in their most exquisite Pains, than submit to the Operation.

In order to cure this imaginary Disease, which is much more fatal than the *Stone* it self, I shall evidently prove, that the *Stone* is very rarely, if ever, attached to the *Bladder*, or involved in a Membrane, by the following Arguments, *viz.*

1. Because it is evident from Experience, that leaden Bullets, &c. have lodged in several Parts of our Bodies for many Years, and yet have never been found to adhere to the Parts which they touched all that while.

2. Because we have no authentic Histories of any that ever died, in whose *Bladder* the *Stone* was found to adhere.

3. Because the most experienced *Lithotomists*, such as *Tolet*, *Rau*, *Cyprianus*, &c. deny that ever they met with any such Thing, in all their Operations.

4. But supposing it was possible for the *Stone* to adhere to the *Bladder* if it kept always still in the same Place; yet its constant Motion, from its first Formation, upon every Alteration of the Position of the Body, would certainly hinder it.

5. Be-



5. Because if it adhered to the Fund of the *Bladder*, it would always pain them most when they stood upright, and when the *Bladder* was fullest of Water: If to the right Side, it would pain them most, when they lay on the left; and *e contra*; but we never observe any such Symptoms.

6. Because it is never talked of, except, when the Operator happens to pull out a Part of the *Bladder* along with the *Stone*, and then they immediately pretend the *Stone* adhered: But if you throw that very *Stone* into a Bason of Water, you will see it clear it self in a little Time, of all the Blood and Membranes, without perceiving any Filaments to go betwixt the *Stone* and Membrane, which must have been, if they had cohered.

7. Because the Liquor which is continually discharging from the Glands in the innermost Coat (to defend the *Bladder* it self, from the Acrimony of the Urine) makes an Adhesion impossible.

8. If the *Stone* was covered with a Membrane, it would hinder it from pricking, and causing such intolerable Pain, as usual; and also prevent its Increase, and found, when touched with the *Catheter*.

From whence it is evident, that the Adhesion of the *Stone* to the *Bladder*, is only an imaginary Notion, invented to skreen the Mistakes of ignorant, or heedless Operators. The most judicious *Rossetus* is also of the same Opinion.

*Sape*



Sæpe contingat prehensam his, atque illis instrumentis cum calculo partem vesicæ non paucam lacerari, & tam conspicue cum eo agnitam extrahi, ut inde necessarius arguatur successisse interitus: cujus maleficii criminationem quia aliter effugere nequeunt, eludunt sæpè artifices composito ad id figmento pelliculæ scilicet nescio cujus calculos crescentes vestientis.

Quid tunc vesicali Sectione opus esset, si calculus Membranâ vestiretur? nam ea molliculo lævore suo, calculi cum vesica contactum, attritionemque prohiberet, & consequenter dolorem auferret, qui tamen tunc est intolerabilis, ut ex eo solo maxime patet, quod miseros calcularios in hoc Sectionis præcipitium, velint nolint adigit. Sed hoc præcipue (illis ipsis Judicibus) eorum mendacium aperte convincit, quo illa sua Homicidia excusant. Omnis enim calculus quem extrahunt, ab iis priusquam extrahatur solet deprehendi ejus ad Catheterem sonoro illisu. (Alioquin ne id quidem tentant) at nullus Membrana circum-vestitus calculus potest deprehendi eo ad Catheterem illisu sonoro, (interposita enim Membrana id vetat.) Nullus igitur ab iis extrahitur Membrana circum-vestitus calculus, quicquid nobis contra garrire velint.

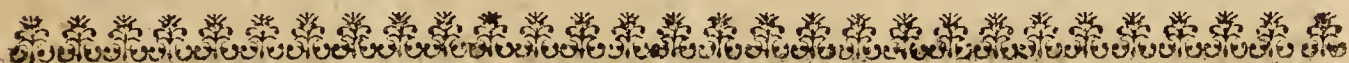
“ It often happens that a Part of the *Bladder* being  
 “ laid hold of by the Forceps, is torn away with the  
 “ *Stone*, the certain Consequence of which is Death.  
 “ The Reproach of which Mismanagement, they often  
 “ evade, by pretending that the *Stone* was involved in a  
 “ Membrane.



“ Why then should we Cut for the *Stone*, if it is  
 “ thus involved? For the Softness of the Membrane  
 “ would prevent the *Stone*’s touching and pricking the  
 “ *Bladder*, and consequently the Pain; which neverthe-  
 “ less, we find to be so intolerable, as to force these mi-  
 “ serable Persons to run the Risque of the Operation.

“ But this especially, (they themselves being Judges,)  
 “ clearly discovers the Fraud whereby they excuse their  
 “ fatal Blunders; for that before they cut, they always hear  
 “ the *Catheter* strike against the *Stone*, otherwise they  
 “ would never attempt the Operation; and no *Stone* in-  
 “ volved in a Membrane will sound, when touched with  
 “ the *Catheter*, because the Membrane hinders it.

“ Therefore notwithstanding all their Pretences, they  
 “ never extracted any *Stone* covered with a Membrane.



### S E C T. III.

*Whether it is possible to dissolve a confirmed Stone in the  
 Bladder by Medicines, as is pretended?*

**T**H E Chymists boast, that they have such miraculous  
 Remedies, that slighting all the Mutations which  
 other Medicines undergo, in passing through the Body, still  
 preserve a peculiar Virtue, by which they are capable to  
 break, or dissolve the most firm and solid *Stone* in the  
*Bladder*: By which Pretences, they not only pick the

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Pockets



Pockets of the unwary, but often destroy their Constitutions to such a Degree, that it is too late to attempt the Operation when they have done; of which I have seen Instances.

If there really were such Medicines to be purchased at any Rate; it would be most barbarous to expose People to the Pain and Danger of being Cut; but since no such Medicine has as yet appeared (notwithstanding all their Pretences) we cannot be blamed for continuing this Operation, until this most desirable Secret is discovered; because, though some dye after it, many more are relieved from most intolerable and lasting Pains, and restored to perfect Health.

*Ars, Medicamenta ad frangendum calculum quam plurima usurpaverit, quæ tamen (ut Experientia comprobât) pollicentur quidem multa, præstant autem nihil; ideoque sola Chirurgia profuit, quantumcunque sæva, quantumque periculosa sit. Aquapend.*

“ There have been many Things proposed to dissolve the  
 “ Stone in the Bladder, but (as Experience shews) they  
 “ promise a great deal, but perform nothing: There-  
 “ fore Cutting is the only Remedy, though never so cruel  
 “ and dangerous.

This Opinion is also confirmed by the unprecedented Experiment lately made by some of our Cutters, who (at the same Time that they strenuously opposed my Operation, though they had seen five of the first six that were Cut, recover perfectly) took a poor Boy, and delivered him

I

over



( II )

over to the Care of a couple of professed Quacks, who had the Modesty to assert they had a Medicine, which would infallibly dissolve the most confirmed *Stone* in the *Bladder*. But these Gentlemen having published a most ingenious and elegant Account, of the bad Success of these Pretenders, in one of the *Post Boys*, in *April* last; I shall refer the Curious to it.



S E C T. IV.

*Why those who have the Stone in the Bladder, should not defer the Operation.*

**T**HOSE who are satisfied that they have a *Stone* in the *Bladder*, ought not to defer the Operation for any considerable Time.

1. Because there is no Hopes of getting rid of it, any other Way.

2. Because it will always grow bigger, and perhaps more rugged, in Proportion to which, the Danger of extracting it encreases.

3. Because it is apt to occasion Ulcers, Excrecences, &c. in the *Bladder*, which it is very difficult, if possible to Cure.

4. Because it so breaks and weakens their Constitutions, that they will not be able to undergo the Operation, with any reasonable Prospect of Success, &c.

SECT.





## S E C T. V.

*Prognostick Signs.*

**T**HE Prognostick Signs are drawn from the Age, and Constitution of the Patient, Size and Number of the Stones, Standing of the Disease, Diseases conjoined, &c. In Females the Operation succeeds with much more Ease, and much less Danger, than in Males.



## S E C T. VI.

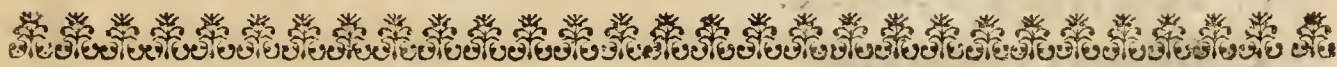
*Proper Seasons of the Year for this Operation.*

**T**HE Spring and Autumn are indisputably the most proper; but if the Patient is frequently in great Pain, it is cruel, nay barbarous, to defer it, for the Reasons above-mentioned.

## S E C T. VII.

*The Preparation of the Patient, before the Operation.*

THEY are to be bled, purged, &c. as their Constitutions will bear, or their Case requires, and always to take a Clyster the Night before.



## S E C T. VIII.

*The various Methods of cutting for the Stone.*

THERE being various Methods of extracting the Stone, proposed by different Persons: It is certainly the Interest of the publick, to be well satisfied which of them is to be preferred.

In Order to answer this necessary Question, I shall,

- I. Recite the various Methods that have been proposed.
- II. Make some Observations on those that are still in Use.
- III. Shew that the Method I here propose, is performed with much more Ease, Speed, and Safety, than any of them.



*The various Methods are,*

1. *The Egyptians.*
2. *Celsus's.*
3. *Marianus's.*
4. *De Franco's.*
5. *Frere Jacques.*
6. *Dr. Rau's.*
7. *Rossetus's Scheme.*
8. *Dionis's Scheme,*

I. The *Ægyptian* Method is described by *Prosper Alpinus*, to whom I refer the Curious.

II. The Method of Operating used by the antient *Grecians*, *Latins*, and *Arabians*, was first described by *A. C. Celsus*, whence it was called *Celsica*: Afterwards *Apparatus Minor*, and now Cutting on the Gripe.

*Parts concerned in this Operation.*

The Parts concerned are,

1. The Skin.
2. The Fat.
3. The *Erector Penis.*
4. Some considerable Arteries.
5. The *Levator Ani.*

†

6. The

6. The *Rectum*.
7. The *Prostatæ*.
8. The *Sphincter Vesicæ*.
9. The *Vesiculæ Seminales*.
10. The Body of the *Bladder*, Muscles of the *Abdomen* &c.

*How to make the Operation.*

THE Operation is made by introducing the fore and middle Fingers of the left Hand into the *Anus*, as high as possible; at the same Time get an Assistant to lay a folded Napkin on his Belly, and press it downwards with his Hands, a little above the Region of the *Bladder*, which forces the *Stone* towards its Neck: Then press your Fingers in the *Anus* against the *Gut* and *Bladder*, and so endeavour to secure the *Stone* between your Fingers and the *Perinæum*, then press it outwards, so as you can see and feel the Tumour, then make an Incision upon it the full Length of the *Stone*. Then extract it with your Fingers or the Crochet, *Tab. 1. Fig. 2.* then introduce your Finger, or the Button *Fig. 7.* to see if there are any more, which extract as before, or with a Pair of Forceps.

This Operation is still practised by some on small Bodies, but cannot so easily be done on large ones, because our Fingers are too short to bring the *Stone* into the desired Place.

*The*



*The Inconveniencies of this Method.*

1. **T**HE violent Compression they are often obliged to make on the Belly (before they can secure the Stone between their Fingers and *Perinæum*) Contuses the Parts, causes great Pain, and sometimes Inflammations, Fevers, &c.

2. When the Stone is rough, it is troublesome, painful, and tedious to make the Incision upon it.

3. There happen frequently great *Hæmorrhagies*.

4. The *Rectum*, *Vesiculæ Seminales*, and *Bladder*, are contused, pricked, or lacerated, by being pressed so hard against the Stone, and sometimes the *Sphincter*, as well as the forementioned Parts, is cut by the Knife, or lacerated by the Stone: Whence Incontinency of Urine, Impotency, *Fistula's*, &c.

*Quam periculosa sit Operatio ista, sapiens quivis facile colligere poterit, ubi perpenderit, quod in ea Chirurgus, facile partes collo. vesicæ adjacentes, vel ipsum collum, imo quandoque etiam ipsum Vesicæ musculum perfodere possit, unde quidem ingens Hæmorrhagia, &c. expectanda, deinde etiam verendum est, ne aeger Urinam retinere nequeat, aut Fistula in parte affecta remaneat.*

*Quanta autem incommoda hæc agro, quantum verò contemptum & dedecus Lithotomo afferant, unicuique facile colligere licet. Hildan.*

“ The



“ The Danger of this Operation every wise Man will  
 “ easily see, who considers that in performing it the Sur-  
 “ geon may very easily cut through the Parts about the  
 “ Neck of the *Bladder*, even the Neck it self, and some-  
 “ times the very *Sphincter*, from whence great *Hæmor-*  
 “ *rhagies*, &c. are to be expected.

“ Besides, it is to be feared that the Patient will ever af-  
 “ terwards be troubled with an Incontinency of Urine,  
 “ Fistula, &c.

“ It is easy to imagine how great an Inconveniency these  
 “ would be to the Patient, and what a Reproach and Shame  
 “ to the *Lithotomist*.

### III. *Marianus's Method.*

This Method of Operating was Invented and practised  
 by *Jo. De Romanis*, but was first published by his Dis-  
 ciple *Marianus Sanctus Barolitanus*, whence it was called  
*Mariana*, afterwards *Apparatus Major* (because of the  
 great Number of Instruments used in making it) and now  
*Cutting on the Staffe*.

#### *Parts concerned in this Operation.*

THE Parts concerned are of three Sorts, *viz.*

1. Those which are Cut, *viz.* the Skin, *Acce-*  
*lerator Muscle*, and *Cavernous Urethra*.

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2. Those

2. Those which are Dilated or Lacerated, *viz.* The Membranous *Urethra*, and *Sphincter* of the *Bladder*.

3. Those that are liable to be injured because of the nearness of their Situation, *viz.* The Body of the *Bladder*, the *Vesiculæ Seminales*, the *Prostatæ*, the *Verumontanum*, the *Rectum*, &c.

*How to make the Operation.*

THIS Operation has been hitherto most in Use, and is performed after the following Manner :

They first pass the Staffe *Tab. 1. Fig. 1.* into the *Bladder*, then they press it against the Bulb of the *Urethra*, and then make an Incision upon it with the *Lithotome*, *Fig. 2.* from two, to four Inches long, according to the Bigness of the Patient; that done they introduce the *Gorgeret*, *Fig. 3.* or the two *Conductors*, *Fig. 4. 5.* then they withdraw the *Staff*, and pass the *Forceps*, *Fig. 6.* on the *Gorgeret*, or between the *Conductors*, which by Reason of the Streightness and Length of the Passage, requires a great deal of Force, then they withdraw the *Director*, and endeavour to charge the *Stone* in the *Forceps*, but if that cannot be done in some Time, they withdraw the *Forceps*, and introduce the Button, *Fig. 7.* and upon it the curved *Forceps*, *Fig. 8.* (madly fancying that the *Stone* is situated above the *Os Pubis*, or about the Fund of the *Bladder*,) then the *Stone* being at length charged in either of these *Forceps*, they endeavour to extract it, but if they find that

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imprac-



impracticable, (either from the Bigness, Figure, or hold they have got of the *Stone*;) they quit their hold, and withdraw the *Forceps*, and introduce the Button again, and upon that the *Dilators*, *Fig. 9.* with which they dilate the Wound, accordingly; then they introduce the *Forceps* again as before, and charge them with the *Stone*, and then extract it, (which I have seen take all the Force of a strong Man) then they introduce the Button again to search if there are any more, which they extract as before; but if they break in extracting, the small Pieces must be scooped out with the Scoop, *Fig. 10.* and the large Ones turned out with the Crochet, *Fig. 11.* or extracted with the *Forceps*, as before.

*The Inconveniencies of this Method.*

THE Situation of the Parts, Instruments, and Method of Operating being described, it will not be difficult to Account for the Danger, Laboriousness, and frequent bad Consequences of this Operation.

That this is the most Dangerous of all Chirurgical Operations, will appear from a Computation of those who do, and do not escape after it.

That it is the most Laborious of all Operations, every one must be persuaded, who hath either made, or seen any Number of these Operations performed.

The Danger and Laboriousness of this Operation are caused,

1. By

1. By the Length and Streightness of the Passage thro' which the *Forceps* must pass into the *Bladder*, and when charged with the *Stone* must return back again.

2. By the great Number, and necessary Largeness of the Instruments used, *Tab. 1.* and the frequent Occasion to introduce and retract them.

3. By the Number, Figure, and Bigness of the *Stones*, Force required to extract them, &c.

Whence great *Hæmorrhagies*, violent Pain, Contusion, and Laceration of the Parts, Convulsions, Mortification, and Death.

The bad Consequences which often attend this Operation, (in those which escape with Life) are *Incontinency of Urine*, Impotency, *Fistula's*, &c. which every one must be satisfied off, that have seen any Number of those that have undergone the Operation.

In some of whom you will observe an Incontinency of Urine, in others Impotency, in others *Fistula's*, and in others all of them; any one of which is little better than the *Stone* it self.

About three Years ago, I cured a young Fellow of a *Fistula* in the *Perinæum*, that had been Cut eight Years before in one of the Hospitals; all his Urine, except now and then a Drop or two, pass'd involuntarily through the *Fistula*, both Day and Night, which made him offensive to himself, and every one else that was near him.

Before I began the Cure of the *Fistula*, I took a *Catheter* and tryed whether the common Passage was open,  
but



but found it so straightned, that I put him to great Pain, to introduce it a very little way : I therefore continued to pass it a little farther every Day, for five or six Days successively, (because it was to no purpose to endeavour the Cure of the Fistula before the Passage was enlarged) which put him to near as much Pain every Time as if he had been cut, yet he endured it, with a great deal of Satisfaction, in Hopes of getting rid of so detestable a Disorder. The Passage being at length dilated, I set about curing the Fistula, which I performed accordingly, and he has been perfectly well ever since.

These Inconveniencies are sufficiently attested by the Observations of some of the best Practitioners. E. G.

*Denique in illarum partium nervosarum tanta divexatione, per tot sæpe Instrumentorum in illa cissione, dilatatione, Catheteris impositione, crebro denique attactu & laceratione, maximum est periculum inflammationis, febris, virium debilitatis, & mortis: præcipuè, cum ipsa jam antea ex prægresso calculi attritu vesica plerumque sit exulcerata & inflammata. Tandem, ut omnia rectè successerint, periculum est, ne post exsectum calculum maneat defectus detinendi Urinam, quod fit propter Musculum colli vesicæ læsum, vel ex vulnere Fistula maneat, & per eam intolerabili fœtore, & magnis aliquando doloribus, tota vita, Urina effluat. Fienus.*

“ By the frequent Introduction, and Retraction of so  
 “ many Instruments, after the Incision is made, these  
 “ nervous Parts are dilated, irritated, and lacerated,  
 “ whence Inflammation, Fever, loss of Strength, and  
 “ Death; especially if the *Bladder* was inflamed, or ul-  
 “ cerated before, by the Asperities of the *Stone*. But  
 “ supposing the Operation succeeds very well, yet you  
 “ may have an Incontinency of Urine afterwards, because  
 “ the *Sphincter Muscle* is injured, or the Wound turns  
 “ to a *Fistula*, through which the Urine flowing ever after-  
 “ wards, occasions always an intolerable Stench, and some-  
 “ times great Pain.

*Ingens ac magnus calculus ut per collum vesicæ extra-*  
*hatur, propter ejus angustiam longum requirit tempus, in-*  
*terim aeger ingentibus affligitur doloribus, vesica, ipsiusque*  
*fibræ dilacerantur, sanguis copiose profluit, vires dissol-*  
*vuntur, maximoque cum cruciatu aeger vel in ipsa opera-*  
*tione aut paulo post extinguitur. Hildan.*

“ When a large *Stone* is extracted through the Neck  
 “ of the *Bladder*, because of its Straightness, it takes up  
 “ a long Time; in the mean Time, the Patient suffers in-  
 “ tolerable Pain, the *Bladder* and its *Fibres* are tore, there  
 “ is a great Flux of Blood, loss of Strength, and the Pati-  
 “ ent, by reason of the great Torture, dies, either in or  
 “ soon after the Operation.



*L'on peut faire reflexion que dans le temps de la Lithotomie par le grand appareil, on incise l'uretre en un endroit éloigné de plus de quatre travers de doigts du Sphincter de la vessie, & que les reservoirs de la Semence n'en peuvent pas être blessez ; mais si la Pierre se trouve grosse, fort âpre & herissée, la grande laceration, & la dilatation pourront froisser & endommager les vesicules Seminales, les Muscles érecteurs, & ceux qui aident à l'éjaculation, car les uns & les autres sont situez proche la route que tiennent les Instrumens & la Pierre, lorsqu'elle est tirée par cette façon d'operer. Tolet.*

“ They may observe that in cutting on the Staffe, they  
 “ cut the *Urethra*, in a Place more than four Fingers  
 “ Breadth distant from the *Sphincter* of the *Bladder*, and  
 “ that the *Vesiculæ Seminales*, cannot be wounded by it.  
 “ But if the *Stone* is large and rugged, the great Lacera-  
 “ tion and Dilatation of the Parts may bruise or destroy  
 “ the *Vesiculæ Seminales*, *Erector Muscles*, and those  
 “ which assist in Ejaculation, for they are all situated near  
 “ the Rout, through which the Instruments and *Stone*  
 “ pass, in this Method of Operating.

*Lorsque pour tirer la Pierre hors de la Vessie on fait Incision au perinée, on coupe les deux Muscles accelérateurs, on ouvre l'urethre, & l'on pousse par le col dans le corps de la vessie une tenéte dont on charge la pierre que l'on tire avec cet Instrument par la playe de l'urethre.*

*thre. Or comme le Diametre du Canal interieur du col de la Vessie est beaucoup plus petit que le Volume que forment ensemble la tenéte & la pierre; de là Vient qu' on ne peut la tirer qu' avec de Violents efforts: Ce qui cause au Col & au corps de la Vessie une Contusion & un déchirement considerable, suivis quelque fois de la Mort, ou d'une Incontinence d' Urine, ou d'une Fistule, par laquelle ceux qui échapent de l' Operation perd involontairement leur Urine. Mery.*

“ When they make an Incision on the *Perinæum*, in  
 “ order to extract the *Stone* out of the *Bladder*, they  
 “ cut the *Accelerator Muscle*, and *Urethra*, then they  
 “ thrust a Pair of Forceps through the Neck into  
 “ the Cavity of the *Bladder*, with which they lay hold  
 “ of the *Stone*, and draw it through the Wound. But  
 “ the Diameter of the Passage being much less than the  
 “ Bigness of the Forceps and the *Stone* together, they  
 “ cannot be extracted, but by great Force and Violence;  
 “ by which the Neck of the *Bladder*, &c. are very much  
 “ contused and lacerated, whence sometimes Death, a  
 “ *Fistula*, or an Incontinency of Urine, in those that  
 “ escape.

#### IV. *De Franco's Method.*

What Authors call the high Operation, *i. e.* Cutting for the *Stone*, on the lower Part of the Belly, was first practised by *Peter de Franco*, of *Turriere* in *Provence*, of which he gives the following Account, in his Treatise of *Hernia's*, published at *Lyons*, 1581. Je



*Je reciteray ce que une fois m' est advenu voulant tirer une pierre a un enfant de deux ans ou environ : auquel ayant trouve la pierre de la grosseur d' un œuf de poule, ou peu pres, Je feytout ce que je peu pour la mener bas : & voyant que je ne pouvoye rien avancer par tous mes efforts, avec ce, que le patient estoit merueilleusement tormentè, & aussi les parens desirans qu' il mourust plustost que de viure en tel travail : joint aussi, que je ne vouloye pas quil me fut reprochè de ne l'avoir seu tirer, (qui estoit à moy grand folie) je deliberay avec l' importunité du Pere, Mere & Amis, de Copper le dit enfant par dessus l' Os Pubis, d' autant que la pierre ne volut descendre bas, & fut coppé sur le Penil, un peu a Costè & sur la pierre. Car je leuoyz icelle avec mes doigts, qui estoiet au fondement, & d' autre Costé en la tenant Sujette avec les mains d' un Serviteur qui comprimoit le petit ventre au dessus de la pierre, Dont elle fut tiree hors par ce moyen, & puis apres le patient fut guarý, (non obstant qu' il en fut bien malade) & la playe consolidée : Combien que je ne conseille a homme d' ainsi faire. Ains plustost user du moyen par nous inventé du quel nous venons de parler.*

“ He says, he had a Child about two Years old, who  
 “ had a *Stone* in the *Bladder* as big as a Hen's Egg,  
 “ brought to him to cut: He used all his Dexterity to  
 “ force the *Stone* down to the Neck of the *Bladder*, but  
 “ found it impossible to be done: The Child was in that  
 “ Torture and Misery, that the Parents wished him rather

H

“ dead,



“ dead, than he should live longer in so doleful a Condi-  
 “ tion. *De Franco*, on the other Hand, thinking it  
 “ would tend to his Dishonour not to take away the  
 “ *Stone*, at last resolved to make Tryal, whether he could  
 “ not bring it to the very Groin, which he did, by put-  
 “ ting his Fingers into the Fundament, and raising up the  
 “ *Stone*; he caused his Servant, on the other Side oppo-  
 “ site to him, to press it down to the Place intended for  
 “ Incision; which he made, took out the *Stone*, and, tho’  
 “ the Child was very weak, recovered him, and healed  
 “ the Wound: But he advises others not to follow his  
 “ Example; and, instead of it, recommends the Opera-  
 “ tion which he calls his own Invention, and has describ-  
 “ ed, in the foregoing Part of the same Chapter.

I am as much surpris’d at his Success (considering his un-  
 couth Way of operating, and the low Condition of his  
 Patient) as I am, that he was not thereby encouraged to  
 consider farther on it, and improve it, instead of telling  
 us, that though he succeeded, yet we ought never to at-  
 tempt it. For which he is severely reprehended by the  
 most judicious *Rossetus*, in these Words,

*Per Abdomen Cystotomiam absolvi feliciter posse  
 jamdudum augurabar; sed operis Novitas, & Thrasonum  
 quorundam Os infrene, mihi Silentium imperabant.*

*Interim incidi commodum in quendam Petri Franconis  
 libellulum de Herniis gallice inscriptum, ubi celeberrimus  
 ille*



*ille iatrocelicus historiam memorabilem contexit cujusdam bimi infantuli, vesica per divisum a se juxta pubem hypogastrium aperta a calculo liberati, obsecrantibus ideo id parentibus, quòd aliter ei sectori nihil successerat, omnia prius frustra experto, ut ad perinæum calculum admooveret. Id vero unice miror, cur deinceps id tentari dehortetur. Invidetne hominum Societati bonus ille vir eam inventi (licet fortuiti & coacti) fœlicitatem? aut sibi & collegis esuritionem præmetuit? aut notam ipsorum censoriam, & ab eorum Symphratria, & Collegio exilium formidat, tanquam cornicum oculos confixerit? Quidnam enim postea id jam usu cognitum profuisse, rursus profore vetabit, viribus ægri constantibus, quod attritis iisdem misere vexato jamque Semineci infantulo, profuisse constitit, aliis omnibus frustra tentatis? Dissuadet opinor, quod infantulus ab ea Sectione ægrotaverit: atqui nisi prius idem graviter ægrotavisset, eò ventum non fuisset. Interim cogitandum est quin male habuerit fieri non potuisse, sed mirandum etiam quod pejus ei non fuerit, cum bimulus tantum esset, cum diuturno dolore fractus, cum recenter antea fatigatus, intromissione præcedente digitorum Sectoris crassorum in ægrotantis tenellum podicem, & appressu pugni ejusdem in hypogastrium, ut solent in eo ipsorum veteri opere: quæ omnia illum potius, quam Sectio hypogastica affligere, & mirum etiam cur non ad mortem cogere potuerunt.*

“ I have a great while imagined, that the Stone might  
 “ safely be extracted through the *Hypogastrium*, but the  
 “ Novelty of the Operation, and the unbridled Tongues  
 I of



“ of malicious People, deter’d me from it. In the mean  
 “ Time I fortunately met with *Peter Franco’s* Treatise of  
 “ *Hernia’s*, written in *French*, in which that expert Rupture-  
 “ Curer relates a remarkable History of a Child of two  
 “ Years of Age, which he cured of the *Stone*, by cutting  
 “ into the *Bladder*, through the *Hypogastrium* near the  
 “ *Os Pubis*, the Parents pressing him to do it, which  
 “ otherwise he had never undertaken, because he had in  
 “ vain endeavoured, by all Means possible, to bring the  
 “ *Stone* down to the *Perinaeum* as usual. But I very  
 “ much Wonder why, after his Success, he should advise  
 “ us not to attempt this Method. Did that good Man  
 “ envy Mankind the Happiness of his Discovery, though  
 “ accidental, and as it were forced upon him, or was he  
 “ afraid that it would be detrimental to him and his Frater-  
 “ nity, or did he fear being expelled their Society in an  
 “ ignominious Manner? Of what Use would his Disco-  
 “ very have been to Posterity, when he forbids us to prac-  
 “ tice it, even on the most promising Subjects; though he  
 “ himself succeeded on an Infant worn out and half dead  
 “ with Pain, after all other Methods had been tryed in  
 “ vain. He dissuades us from it, I suppose, because the  
 “ Child was much disordered by the Operation; but if he  
 “ had not been very ill before, this Experiment had never  
 “ been tryed.

“ I am so far from being surpris’d that he was sick after  
 “ it, that I wonder he was not worse, considering he was  
 “ but two Years old, wasted with continual Pain, so lately  
 “ fatigued



“ fatigued by the Operator’s thrusting his Fingers up the  
 “ *Anus* of so young and tender a Subject, and his press-  
 “ ing upon the Belly, as usual in that ancient Method ;  
 “ all which, rather than the *Hypogastrick* Section, must  
 “ very much disorder him, and its a Wonder they were  
 “ not the Occasion of his Death.

*History of Bonnet, and Groenvelt.*

The late Monsieur *Tolet*, *Lithotomist* to the King of *France*, gives the following Account of one *Bonnet*.

*Feu M. Jonnot m’a dit autrefois que M. Bonnet Chirurgien, qui pratiquoit il y a tres long temps la Lithotomie dans l’ Hôtel Dieu de Paris, l’ avoit assuré d’en avoir taillé de cette façon. M. Petit Maître Chirurgien de cet Hospital m’a dit l’ avoir vu pratiquer sur une petite fille par le même M. Bonnet.*

“ Mr. *Tolet* says, that the late Mr. *Jonnot* (who was  
 “ also a famous *Lithotomist*) told him formerly, that  
 “ Mr. *Bonnet* a Surgeon, who practised *Lithotomy* a con-  
 “ siderable Time ago, in the *Hotel Dieu* at *Paris*, as-  
 “ sured him (*viz.* Mr. *Jonnot*,) that he had cut after that  
 “ Manner. Mr. *Petit*, Master Surgeon of that Hospital,  
 “ also told our Author, that he had seen it practised by the  
 “ same Mr. *Bonnet* on a young Girl.

Monsieur *Dionis* also mentions the same Man.

*On nous assure que Monsieur Bonnet a pratiqué souvent cette Operation a l' Hôtel Dieu de Paris avec une heureux succes, & que même Monsieur Petit luy a vû faire.*

“ We are assured that Monsieur *Bonnet*, frequently,  
 “ and with good Success, perform'd this Operation, at the  
 “ *Hotel Dieu* in *Paris*, and that Monsieur *Petit* has  
 “ seen him do it.

This is all the Account we have of this *Bonnet*, who they say perform'd it several Times publicly, and always with Success, yet which is very strange, they have given us no Account of his Method of Operating, or why he was not imitated by his Contemporaries.

“ Dr. *Groenvelt* tells us, in the *English* Edition of his  
 “ Book on *Lithotomy*, published in 1710. that he once had  
 “ a Patient in *Long-lane Moorfields*, upon whom he was  
 “ obliged to perform this high Operation; and he very suc-  
 “ cessfully extracted the *Stone*, by making Incision near the  
 “ Groin, the Patient soon recovering; which shews that  
 “ Wounds in the *Bladder* are not always Mortal.

I cannot but Question the Truth of both *Bonnet's*, and *Groenvelt's* Operations: *First*, because they are mention'd after so slight a Manner: *Secondly*, because one of the oldest Surgeons in *Paris* (that was very intimate with the above mention'd *Petit*, many Years before his Death) assured a Friend of mine, that he never heard him mention these Operations of *Bonnet*: *Thirdly*, because one of the oldest *Lithotomists* here, told me, that he never heard of *Groenvelt's* Operation,



Operation, till he published the *English* Edition of his Book on *Lithotomy*; for which, and many other Reasons, he did not believe it.

V. *Frere Jacques's* Method,

Is very exactly described, and its Inconveniencies shewn by that excellent Surgeon, Monsieur *Mery*, as also by Monsieur *Dionis*, to whom I refer the inquisitive Reader.

VI. Dr. *Rau's* Method.

I am informed that Dr. *Rau* had very extraordinary Success, and though he Cut upon a *Staffe*, he made the Wound very near the same Place, as in Cutting on the Gripe, and so went directly into the Cavity of the *Bladder*, without touching the *Urethra*, as in the common Way.

I do not hear that he has published any Account of it himself, and therefore refer the Curious to the learned Professors at *Leyden*, who were Eye-Witnesses of his Dexterity and Success, for a more particular Description of it.

*Rossetus's* Scheme.

My Friend Doctor *Horseman*, brought me from *Paris* in *November* last, the second Edition of *Rossetus de partu Cæsareo*, printed in 1590. In which I find the high

†

Operation

Operation proposed and described with great Judgment, Sagacity, and Exactness.

This excellent Author has certainly been very little read, or very ill understood, else this Method had not been so long a Secret. Had I been so lucky as to have met with that invaluable Book, before I had Cut living Bodies, it would have saved me a vast deal of Thought, Labour, and Expence, in composing the Theory of my Operation, it is so clearly and evidently demonstrated and accounted for, in that profound and venerable Author.

He proposes three Ways, of making this Operation, in all which the *Bladder* must be distended with some Liquor.

#### I. Way.

He fills the *Bladder* with Barley Water, Milk, or a vulnerary Decoction with the *Catheter* and *Syringe*, *Tab. 2. Fig. 1, 2, 3.* and secures it from flying out again, by an Assistants Hand, or a Ligature.

Then he cuts through the Skin and major Part of the Muscles, with the Knife *Fig. 4.* Then he makes a puncture in the Bladder with the Knife *Fig. 5.* Lastly he introduces at the same Wound the Knife *Fig. 6. or 7.* with which he finishes the Incision.

Then he extracts the *Stone* with his Fingers, or Forceps, according as the Case requires.

#### II. Way



II. *Way.*

He fills the *Bladder* with a furrowed *Catheter*, *Fig. 8.* Then he withdraws the Syringe, and introduces the Stil-let, *Fig. 9.* to stop the egress of the Water, then he turns the Furrow of the *Catheter* towards the *Linea Alba*, and presses against it (as they do against the *Perinæum* in the common Operation) and then cuts upon the Furrow.

III. *Way.*

He orders a Ligature to be made on the *Penis*, and kept on for two, three, or more Days, until the *Bladder* is sufficiently distended, as in an *Ischury*. Then Cuts as before.

The Variation between his first Scheme, and my Operation, will appear by comparing them together; his second and third Schemes are altogether impracticable.

*Dionis's Scheme.*

Monsieur *Dionis* (on whom some of our Cutters have endeavoured to palm this Operation) is so very Inconsistent with himself, in his Opinion about it, that it is very hard to tell whether he is for or against it.

In the first Place he gives us his Opinion of it, in these Words.

*Je ne trouve point cette Operation si perilleuse qu'on pourroit s'imaginer, je la Crois au contraire moins Dangereuse que la petit & que le grand Appariel.*

“ I do not think this Operation so hazardous as it  
“ may be imagined, but believe it, on the contrary, less  
“ dangerous than the lesser, or great *Apparatus*.

*Secondly*, He gives us a Plate of the Instruments he would have us Use.

*Thirdly*, Directs how we should Use them.

*Pour pratiquer heuresuement cette Opération, il faudroit introduire dans la Vessie une sonde creuse A, dont l'ouverture extérieure seroit assez ample pour y faire entrer le bout de la Seringue B, avec laquelle on empliroit la Vessie d'eau qui auroit un degré de chaleur pareil à celui de l'Urine. On feroit une Ligature à la Verge avec cette Band C, afin qu'en Seringuant l'eau ne s'échappât point de la Vessie à côté de la sonde ; & lorsqu'on jugeroit par la quantite de l'injection que la Vessie dût être pleine, on en retireroit la sonde ; & on ressereroit un peu la Ligature de la Verge, afin de comprimer l'Uretre assez pour empêcher l'eau de Sortir : Ensuite le Malade assis dans une Chaise presque à son séant, on luy feroit une incision Longitudinale avec le scalpel D, entre les deux têtes des Muscles droits, & les deux pyramidaux ; apres quoy appuyant du doigt sur le fond de la Vessie, on sentiroit la fluctuation de l'eau dont elle seroit gonflée, & pour lors on feroit avec une grosse Lancette armée E, une ponction à cet organe dans ce même endroit. On con-*  
*noitroit*



noîtroit aisément quand la Vessie seroit ouverte, par l'eau qui en sortiroit, & aussitot avec le Crochet F, on pourroit fair sortir la pierre ; ou bein on plongeroit une tenette G, longue & étroite dans l'ouverture, par laquelle l'eau s'écouleroit, & ayant trouvé la pierre dans la Vessie, il seroit pour lors facile de la Charger, & de la tirer par cette ouverture : La playe se gueriroit sans peine parce que tenant le Malade en une situation presque droits dans son lit, l'Urine que se porte continuellement dans la Vessie ; ne pourroit point montre jusque à la playe pour en empêcher la ré Union, comme elle fait aux deux autres maniers d'operer ; & de plus l'Urine trouveroit toujours son chemin ordinaire pour s'écouler.

“ In order to the successful Performance of this Ope-  
 “ ration, we must introduce into the *Bladder*, the ex-  
 “ cavated Probe A, whose exterior Aperture must be  
 “ large enough to admit the Entrance of the Syringe, B,  
 “ with which the *Bladder* is to be filled with Water, of  
 “ about the same Degree of warmth, with that of  
 “ Urine. We then make a Ligature about the Yard,  
 “ with the Band C, that in Syringing, the Water do  
 “ not escape out of the *Bladder* along the Side of the  
 “ Probe ; and when by the Quantity of the Injection,  
 “ we conclude that the *Bladder* must be full, we draw  
 “ out the Probe, and pull the Ligature of the Yard a  
 “ little tighter, in order to press the *Urethra* sufficiently,  
 “ to hinder the escaping of the Water through that Pas-  
 “ sage. The Patient being seated in a Chair, almost on his  
 “ Buttocks

“ Buttocks, we make an Incision length ways with  
 “ the Penknife D, betwixt the two Heads of the strait, and  
 “ the two pyramidal Muscles; after which, resting  
 “ a Finger on the Fund of the *Bladder*, we feel the  
 “ Fluctuation of the Water, with which it is tumified,  
 “ when with a large armed Lancet E, we must make a  
 “ Puncture in that Place of that Organ. We may easily dis-  
 “ cover when the Aperture is made in the *Bladder* by the  
 “ Water which will run out, immediately after which, with  
 “ the Crotchet F, we may draw out the *Stone*, or else thrust  
 “ a long and narrow pair of Forceps G, into the Aperture  
 “ through which the Water flows out, and having found  
 “ the *Stone* in the *Bladder* it will be easy to charge them  
 “ with it and draw it out at the Orifice. The Wound heals  
 “ without Pain, by Reason that keeping the Patient in an  
 “ almost erect Posture in his Bed, the Urine which conti-  
 “ nually inclines to the *Bladder*, cannot reach the Wound  
 “ and hinder its closure, as in the two other Ways of Ope-  
 “ ration, but besides always turns into its ordinary Passage  
 “ in order to run off.

The Substance of all this is taken from *Rossetus* (tho’  
 he has not mention’d his Name) and altered so much for  
 the worse that it is plain he did not understand him.  
*E. G.*

1. In the Position he would have the Patient put, no  
 Man can make the Operation.

2. After



2. After the Punction he orders to be made in the *Bladder*, we would not have room to introduce the Forceps, much less extract a *Stone*, &c.

3. He says the Water will always come the ordinary Way, which looks as if he had never seen, read, or heard of either accidental or artificial Wounds in that Part of the *Bladder*, &c.

Notwithstanding he expressly prefers this, to both the common Operations in the Beginning, yet before he ends he alters his Mind.

*Cette maniere paroît la meilleure, mais avant que de luy donner la preference sur les deux autres, il faut qu'elle soit confirmée par plusieurs experiences, dont la premiere se pourroit tenter sur une Criminelle condamné à la mort, & qui auroit la pierre.*

“ This Manner of operating seems the best, but before  
“ we allow it the Preference before the two others, it  
“ must be confirmed by several Experiments, the first of  
“ which may be tryed on some Criminal condemned to  
“ Death, and afflicted with the *Stone*.

For which Opportunity he spent his whole Life to no purpose, and tho' he had lived six times longer, he might have gone without it, and so the World would still have wanted so useful a Discovery.





## S E C T. IX.

*The New METHOD.*

HAVING thus described and animadverted upon both the antient and modern Ways of performing this Operation; I shall next give a short Account of my *new Method*, the Principles of which were first laid down by the most sagacious of all Surgeons, the abovemention'd *Rossetus*: Yet he ingenuously owns, that he never practised it on living Bodies, in the following Words;

*Sed an vita ob nostram hanc Sectionem periclitetur, ex solo successu Sectionis Vivorum apparere potest.*

“ Whether this is preferable to the common Methods,  
“ can only be known by the Success in cutting living  
“ Bodies.

And in another Place,

*Verum sitne ea etiam ipsa quam designamus pars interna & externa lethalis necne nondum satis testatum arbitror, sed in vivis duntaxat experiri licet.*

And lastly, bewails his Misfortune, in not having an Opportunity of making so probable, and so useful an Experiment.

*Ceterum*



*Ceterum ea demum quæ in Cadaveribus expertus sum, & qua potui sedulitate in vivis tuto facienda Meditatus, bona fide Lectori proponere volui, Operationum talium in vivis observandarum exempla daturus, siquis Irus Calculosus se hætenus obtulisset, aut nisi lamentabile Henrici Regis fatum recens nobis eam ansam de manibus extorsisset qui quatuor aut si opus esset pluribus suspendio adjudicatis reis vitam me impetrante indulserat, si ab eo opere nostro sospites evasissent.*

“ What I have observed in my Experiments on dead  
 “ Bodies, I have faithfully communicated to the Reader,  
 “ and should also have given Instances of these Operations  
 “ on living Bodies, had any poor Patient offered, or had  
 “ not the lamentable Fate of King *Henry* the Third,  
 “ (who had promised me four or more Persons that were  
 “ condemned to Death, to make the Experiment upon,  
 “ and them, their Lives if they recovered) deprived me  
 “ of the Opportunity.

From what has been said, I think it is very evident that *Rossetus* wanted an Opportunity, *Dionis* both the Skill and the Courage to do it, and that none of our Cutters (notwithstanding the inimitable Expression, and Argument of *Rossetus*) ever thought it feasible, until I began it in 1719, upon the following Considerations, *viz.*

1. Because of *De Franco's* Success, though on a very young and weak Patient, that had a very large *Stone*.

1

2. Be-



2. Because I found innumerable Instances in our most authentick Authors, and Army Surgeons, of accidental Wounds of the *Bladder* being perfectly cured; of which I shall mention a few.

*Rossetus* gives us the following Account of a Wound in the *Bladder*.

*Paræus nulli non cognitus & doctissimus ille Iatrochirurgus Fr. Rastius hujus Historiæ testes mihi locupletissimi, utpote oculati fuerunt, quam ego tum ex aliis compluribus, tum ex ipsa Chirurgi ad medendam adhibiti tripode & verbis & scripto ex ejus diariis fideliter desumpto didici, & hic transcripsi, jam olim quidem auditam ex ipsius vulnerati ore, sed nondum sat mihi (ut ingenue fatear) persuasam. Talibus enim in rebus mihi imponi non patior.*

*A. T. Confossus fuit infra Umbilicum venter Pugione satis lato. Ei xix. diebus ac noctibus totis vulnere solo, nec prorsus alio meatu emanans lotium Vesicam haud dubie læsam arguebat: quod tum merum exiret ab ejus parte magis exangui, & minus carnea jure optimo stillare conjiciebatur. Vulneris præterea accepti sedes editior insinuabat necessario id viscus parte sui summa (qua minus verè carneum esse videtur) fuisse sanciatum. Florentinus Philippus Chirurgus solers, immisso facillime per Uretram Argenteo Siphunculo, Urinam deduxit, vulnusque citissime percuravit.*

I had the following Story from the Patient's own Mouth a great while ago, yet (as I must ingenuously confess)



“ confess,) I did not believe it: Being very loath to suf-  
 “ fer my self to be imposed on, in Cases of this Nature;  
 “ but afterwards hearing it confirmed by *Parey*, and the  
 “ learned *Rassius*, who were Eye-Witnesses of the Fact,  
 “ as also by the Surgeon concerned in the Cure, I could  
 “ no longer dispute it.

“ *A. B.* received a Wound with a broad Sword, on  
 “ the lower Part of the Belly; all the Urine flowed thro’  
 “ the Wound for nineteen Days afterward, which was a  
 “ certain Sign that the *Bladder* was wounded. The Situ-  
 “ ation of the Wound plainly shewed, that it was in the  
 “ upper Part of the *Bladder*, which is the least fleshy:  
 “ Notwithstanding *Fl. Philippus* an eminent Surgeon,  
 “ having introduced a *Catheter* through the *Urethra*,  
 “ drew off the Urine, and soon afterwards cured the  
 “ Wound.

*Caspar Bauhinus*, relates the following Case;

*Cum tauro fugienti Helvetius se opponeret, ab eo Cornibus petitus, altero in Pectine circa Regionem Vesicæ intruso, penitus transversim perfoderetur, atque Urina in lumborum Regione emanaret: qui tamen Chirurgi operâ sanatus, sine omni incommodo diu postea supervixit.*

“ *A. B.* was gored by a Bull in the lower Part of the  
 “ Belly, the Horn penetrated into the Cavity of the  
 “ *Bladder*, which was evident by the flowing of the  
 “ Urine through the Wound, which nevertheless was

M

“ cured



“ cured by the Surgeon, and the Patient lived many  
 “ Years afterwards without any Inconvenience from it.

C. Stalpart Vander Wiel, has the following Case ;

*Eques quidam nimium lato ense hic Hagæ ita fuit læsus paulo supra Os Pubis media in Abdominis parte non latus, sed anteriora aperiente Vulnere, ut se in Vesicam penetraret gladius; cujus indicium erat per vulnus effluens Urina. Ille autem intra tres Hebdomadas (utut lethalia clamet hujusmodi Vulnera Hippocrates) percuratus est.*

“ T. D. Was wounded at the *Hague* with a broad  
 “ Sword, a little above the *Os Pubis*, in the middle of  
 “ the *Abdomen*, which penetrated into the Cavity of the  
 “ *Bladder*, as was evident from the *Urine* flowing thro’  
 “ the Wound, yet he was afterwards cured in three  
 “ Weeks, notwithstanding *Hippocrates* says, such Wounds  
 “ are mortal.

*Claudius Aymand* Esq; Serjeant Surgeon to his Majesty, told me, that he once cured a Gentleman that was Shot through and through the *Bladder* with a Bullet, and that he has been perfectly well ever since, tho’ it is several Years ago.

From which Instances, &c. I concluded that since random Wounds, made with such uncouth and improper Instruments had been happily cured ; artificial Wounds, made in the most proper Place, with proper Instruments,  
 and



and all necessary Preparations and Precautions, would succeed with much less Trouble, and with much more Certainty.

3. Because I was persuaded by the Structure of the Parts, and the beforementioned Instances, that there would be less Danger of Death after it, and also, that it could never occasion Impotency, Incontinency of Urine, &c. which are frequent after the common Operations.

4. Because upon weighing and considering all the Objections that have been made against it by the Dead, and living, I found them all to be very ill grounded, and most of them perfectly imaginary, as will appear by their Answers. *vid. Sect. xiii.*

5. Because I was firmly persuaded (by the Experiments I had made upon dead Bodies) that I had surmounted the main and only Difficulty, that ever appeared to me in it, *viz.* the Method of performing it, with certainty and Safety.

So by these Motives, I was encouraged to Attempt this Way, in order to relieve Mankind from the most terrible of all Chirurgical Operations, and (by divine Providence) succeeded according to Wish.

*Parts concerned in this Operation.*

The Necessity of being well acquainted with the Structure of the Parts in all Cases, as well as the present,  
before



before we undertake an Operation, is very well expressed by *Hildanus*, in the following Words :

*In omnibus artibus, etiam Mechanicis, commune Axioma traditur, quod quivis opifex, artem suam ad proprium honorem suum, proximique emolumentum dirigere cupiens, ante omnia subjecti sui, h. e. Materiae, circa quam occupatur, proprietates atque naturam agnoscere debeat. Sic quando Aurifaber exactam auri & argenti puri, vel cum aliis Metallis permixti, cognitionem non habet, quomodo aliquid boni atque laudabilis in arte sua præstare poterit? Sic neque faber lignarius, Materiarius, Lapidicida, faber ferrarius, & alii similes, naturam ac proprietates ligni, lapidum, ac ferri ignorabunt; alioquin nunquam verum Scopum perfectæ in arte sua peritiæ attingere poterunt, sed semper a peritis artificibus tyronum loco habebuntur.*

*Quandoquidem igitur homo, nobilissima Dei Creatura, imò ipsa Dei imago existit, meritò illi, qui circa illius Corpus occupantur, non sicut faber lignarius, & lapidicida ligno atque lapidibus, ferrum admove, sed subjecti sui, h. e. corporis humani, præcipue vero ejus partis, cui manus admoturi sunt, exactam cognitionem habere deberent: Si enim hic error aliquis committeretur, longè gravior esset quam si circa prædictas materias accideret. Aurifaber si in opere suo hallucinetur, illudque sinistrè tractet, argentum vel aurum denuò in Crucibulum projicit, nihilque præter tempus atque laborem perdit; faber lignarius, Cæmentarius, ac faber ferrarius, nihil aliud quod magni momenti sit*



*amittit. Chirurgi vero subjectum, circa quod versatur, est corpus humanum. Quocirca ut ipsius Constitutionem & plane stupendam divinamque structuram sciat & intelligat, necesse est.*

“ It is delivered as a common Axiom in all Mechanical Arts, that every Workman who is desirous of gaining Honour, and doing his Neighbour Service by his Business, ought first of all to be well acquainted with the Quality, and Nature of the Subject; *i. e.* the Matter he is to work upon: so when the Goldsmith has not a perfect Understanding in Gold and Silver, either pure, or mixt with other Metals, how can he produce any Thing valuable, and praise-worthy in his Art? so neither can the Carpenter, Stone-cutter, or Smith, and such like, who are ignorant of the Nature and Quality of Timber, Stones, and Iron; otherwise they can never come to Perfection in their Trade, but by the skilful Artificers will be always esteemed as Novices.

“ In as much as Man, the most noble Part of the Creation, yea the very *Image of God*, is our Subject, certainly those who are employed upon his Body, ought not like a Carpenter, or Stone-cutter, immediately to apply their Tools, but should be perfectly acquainted with their Subject, *i. e.* the Structure of the human Body, especially such Parts as they are to operate upon: For an Error here is of much worse Consequence than in the preceeding Subjects. The Goldsmith, if he

I N “ mistakes



“ mistakes or spoils his Work, throws his Gold or Silver  
 “ again into the Crucible, and loses only his Time and Pains;  
 “ the Carpenter, Mason, and Smith, suffer not much  
 “ greater loss. But a Surgeon's Subject is the human Body;  
 “ wherefore it is absolutely necessary, that he should  
 “ know and be well acquainted with the Constitution and  
 “ admirable Structure thereof.

The Situation of the *Bladder*, on which this Operation is founded, has neither been described, nor the Use of it in this Case understood, by any of our Anatomists (who have commonly spent most of their Time in describing those Parts which are of no Manner of Use, either in the Practice of Physick, or Surgery) except the inimitable *Rossetus*, out of whom *Dionis* pick'd it.

He expresseth himself thus:

*Vesica sita est extra Peritonæum & constituit quantum quendam exiguum ventrem.*

Nothing can be more natural and true than this Description. *Dionis* translates it thus;

*La Vessie est placée hors du Peritoine.*

So that the *Peritoneum* to which the superior and back-part of the *Bladder* is attach'd, divides it from the Guts, much after the same Manner as the *Diaphragma* does the *Thorax* and *Abdomen*, and the fore-Part of it which is only concerned in this Operation, is attach'd (by Membranes much like those that join the *Muscles* together) to the *abdominal Muscles* and *Os Pubis*.

This



This Situation is as certain and constant, as that of the Brain, Stomach, or Heart it self, notwithstanding some of our *Curiosi*, have dream'd the contrary; on purpose to puzzle the Cause.

The *muscular* Coat of the *Bladder*, called *Detrusor Urinæ*, is a thick fleshy *Muscle*, from its Neck to the *Urachus*, as is exprest by the best of Anatomists, Mr. *Cowper* in his Figure of it; notwithstanding which, Authors are full of the Danger of the Wounds of the *Membranous* Part of the *Bladder*, though there's no such Part in Nature. *Non ex libris, sed ex dissectionibus, non ex placitis Philosophorum, sed fabricâ Naturæ discere & docere Anatomen profiteor.*

The Parts cut, are the external *Teguments*, *Muscles* of the *Abdomen*, and Body of the *Bladder*.

*N. B.* I should have been more particular in the Description of these Parts, did not my Brother Dr. *Douglass* design speedily to oblige the World with a full and correct Description, not only of the Parts concerned in this, but also of those in all the other Ways of Cutting.



*Instruments to be prepared before the Operation.*

1. **T**HE Table which must be three or four Inches lower at one End, than the other.
2. The Straps, which ought to be very soft.
3. A Cup with Oil.
4. The Catheter and Stillet, *Tab. 4. Fig. 1, 2.*
5. The flexible Tube with its Heads, *Fig. 4, 5, 6.* one of which is screwed into the Head of the Catheter, and the other is slip'd upon the Nose of the Syringe □.

*N. B.* The Tube is made of an Ox's *Ureter*, and was first contrived by Mr. *Cheselden*.

6. The Syringe, *Fig. 7.* which ought to hold Water enough to fill the *Bladder* at once, or twice at most?
7. The Catheter Key, *Fig. 8.*
8. The first Incision Knife, *Fig. 9.*
9. A Sponge.
10. The second Incision Knife, *Fig. 10.*
11. The new Instrument, *Fig. 11.*

It is about the thickness of a common Case Knife, has no Edge but from x to x, which is as sharp as a Razor.

Its other Dimensions are as in the *Figure*, and are to be alter'd as the Case requires.

12. The Forceps, *Fig. 12.*



*Number and Office of Assistants.*

There must be seven intelligent Assistants, of which two are to hold the *Os Ilia* and Knees firm, two others the Shoulders, and one the Head, the sixth is to gripe the *Penis*, and the last to hold the Water Pot, and give and receive the Instruments.

*Situation of the Patient.*

The Patient is to be placed flat on his Back on the Table, with a thick Pillow under his Head, then his Wrists and Ancles are to be fastned together with Straps.

*How to make the Operation.*

The Patient, and the Knee, Shoulder, and Head Assistants, being placed as before directed, the Operation consists of three Parts.

I. In filling the *Bladder*, which is done thus ;

Pass the *Catheter*, *Tab. 4. Fig. 1.* then draw out the *Stillet*, *Fig. 2.* then fill the Syring, *Fig. 7.* with lukewarm Water, then fix it to the brass Head of the flexible Tube, *Fig. 4.* with the Key, *Fig. 8.* then order your Assistant to gripe the *Penis*, so as the Water may not regurgitate, then press the Water leisurely into the *Bladder*,

O

until



until you perceive it is raised so far above the *Os Pubis*, that there is room enough to make a sufficient Incision into it, then withdraw the Syring, and get the *Penis* Assistant to extract the *Catheter* very gently, taking particular Care to straiten his Gripe, so as none of the Water follows it, then let him turn the *Penis* down towards the *Anus*, which will hinder the Water from spurting out, and also keep his Hand out of the Way.

*N. B.* If the *Bladder* is filled too full it gives great Pain, relaxes its *Fibres* so much, that they will with great Difficulty, if ever, recover their natural Tone, and forcibly separates the *Peritoneum* from the *Muscles* of the *Abdomen*, which may occasion Inflammations, Imposthumations, &c.

If it is not filled enough, it will be impossible to make a sufficient Incision into it, and consequently to extract the *Stone*, without contusing and lacerating the Parts, as in the common Operations.

The Medium between these two Extreams must be found out by the Sagacity of the Operator.

II. In making the Wound, which is done thus :

Take the first Knife, *Fig. 9.* and cut at leisure, and with a steady Hand exactly in the middle, from near the upper Part of the Tumor of the *Bladder*, or lower according to the computed Bigness of the *Stone*, down to the *Os Pubis*, continue the Incision till you have got so low, that you can distinctly feel the Fluctuation of the Liquor in the  
*Bladder*



*Bladder* with your Fingers (which will happen before you are quite through the *Muscles*) then wipe off the Blood with the Sponge wrung out of warm Water, then take the second Knife, *Fig. 10.* and place its back in the middle of the *Os Pubis*, then run its Point down towards the *Collum Vesicae*, until you get into the Cavity of the *Bladder* (which is discovered by the issuing out of the Water) then holding your Knife in a perpendicular Line, run it along very quickly towards the Fund of the *Bladder*,) as far as necessary.

*N. B.* If the Wound in the *Bladder* is made too large, then you are in Danger of penetrating into the Cavity of the *Abdomen*.

If it is made too small, then you cannot extract the *Stone*, but with great Difficulty, it being hardly possible to enlarge the Wound afterwards with Safety.

These Extrems are to be avoided as above; but for the more Security, I have lately contrived an Instrument, which in judicious Hands, I believe will prevent both these Accidents: It is used thus.

The Incision being made with the first Knife as above directed, take the new Instrument, *Fig. 11.* and turn the blunt Side towards the Navel, and the cutting Side upon the *Os Pubis*, then holding it in a perpendicular Line, plunge it into the *Bladder* (which will require very little Force, considering its Edge is as sharp as a Razor) then in drawing it out, turn the cutting Part of its lower Side under.



der the *Os Pubis*, which will farther enlarge the Wound.

I have never used this Instrument on living Bodies, but I am very well satisfied by the Experiments I have made on dead Ones, that it will answer much better than any yet proposed.

It is to be made broader or narrower, according to the Bigness of the Patient, or supposed Bigness of the *Stone*, which must be determined by the Judgment of the Operator.

The Incision of the Skin, and major Part of the *Muscles*, ought always to be larger than that of the *Bladder*, which will very much facilitate the Extraction of the *Stone*.

III. In extracting the *Stone*, which is done thus:

The Wound being made, pass the fore and middle Fingers of your left Hand into the *Bladder*, to examine the Figure and Bigness of the *Stone*, then if small, pass the fore and middle Fingers of the Right, into the *Anus*, and raise it up towards the Wound, then you can easily catch hold of it with your Fingers that are in the Wound, and draw it out: But if it is large after having discovered its Figure by your Fingers, introduce the Forceps, *Fig. 12.* between them, into the *Bladder*, then turn the *Stone* into the Forceps with the small End foremost, and take fast hold of it, then draw out your Fingers, and afterwards the  
*Stone,*



Stone, with Leasure and Caution, if it breaks, or there is more than one, take them out with your Fingers as before.

“ *Omnes enim ibi convulneratæ partes dilatari quam*  
 “ *maximè possunt, certè vero multo facilius, & amplius,*  
 “ *quam Perinæi Regio ab aliis secari solita; sic ut ab ea-*  
 “ *rum diffractione in eruendo Calculo timendum non sit,*  
 “ *ad quod opus habent Dilatatorio illo suo mirum in*  
 “ *modum exhorrendo. Rosset.*

The Stone being extracted, lay two or three Pledgets of Lint armed with some good Digestive over the Wound, and a Bolster of Tow over them; then undo the Straps, and carry the Patient to Bed: Then embrocate all the *Abdomen, Scrotum, and Penis*, with warm *Ol. Chamomil.* then turn a Swath a little broader than the Patient's Hand once round him, and pin it on the Dressings just tight enough to keep them on, then order warm Stupes to be laid very frequently on his Belly, wrung out of a strong Decoction of Wormwood, Chamomile, &c. or out of equal Parts of fresh Urine and Lime-Water.

If they are not inclinable to Sleep, soon after the Operation, they must take a gentle *Opiate*, because nothing is so proper as rest.

The same Evening dress the Wound and embrocate the *Abdomen* as before, then anoint the *Groins, Scrotum, and Penis*, with *Unguent Alb.* or *Desicativum rubr.* to prevent their being scalded by the Urine, then apply the Stupes as above.



The Imbrocation and Stupes are to be continued till the Wound is well digested, and the Ointment, till the Water comes all the right Way.

The Wound is to be drest three or four times a Day; when it's well digested, they ought always to lye on one Side or the other, which will very much hasten the Cure.

All the Urine flows through the Wound until the Wound of the *Bladder* is cured, which is sooner or later according to the Constitution of the Patient.

They ought not to be forced to go to Stool, under six or seven Days, unless some particular Reason requires it, because straining to Stool injures the Wound.

They ought never to be taken up, except to get their Beds made, until the Urine comes all the right Way, because it makes them sick, and hinders the Cure of the Wound.

When the Urine begins to come the right Way, it pains and scalds them almost, after the same Manner, and to as great a Degree, as when they had the *Stone* (which is caused by the Contraction of the *Urethra*, that has been so long useless) but it never lasts above a Day or two, and then they make Water with the same Ease and Freedom, as any other Person.

When Children feel this Pain, they catch hold of their *Penis*, and stop its Passage, by which it's forced again out at the Wound, which prolongs the Cure.



Cold is to be avoided by all Means, because it puts them to a great deal of Pain, either to stifle it, or cough out.

They drink Sack, or Sage-Poffet, Sage-Tea, thin Mutton or Chicken Broth, Water Gruel, Ponada, &c.

N. B. That if a flexible *Catheter* could be passed, and kept in the Passage without Pain, it would very much hasten the Cure of the Wound.



## S E C T. X.

### *Method of cutting Females.*

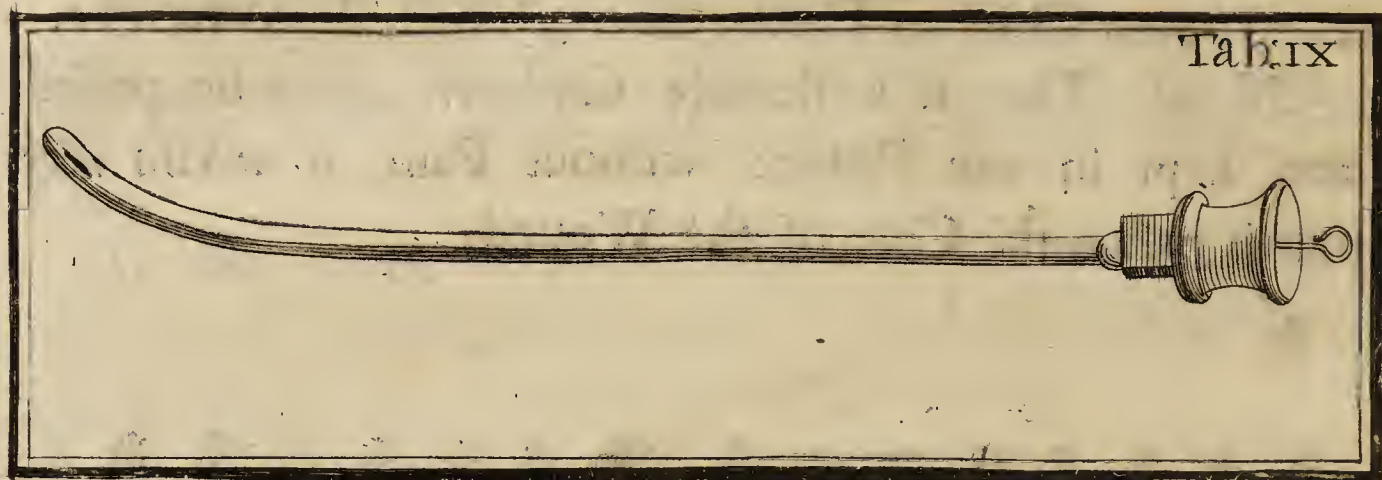
**W**HEN the *Stone* is small, the common Method of extracting it is best; but when they are large, they cannot be extracted the common Way, without running the Risque of having an Incontinency of Urine afterwards, and therefore in such Cases, they ought to be Cut thus:

Introduce the *Catheter*, *Tab. 9.* with the Tube fix'd to it, as before, then get an Assistant to thrust the fore, and middle, Fingers of his left Hand into the *Vagina*, and compress the *Urethra* against the *Os Pubis*, then  
fill



fill the *Bladder*, extract the *Catheter*, and make the Operation, as in Males.

The Operation is a great deal easier made, and the Cure much sooner performed, than in Males.



## S E C T. XI.

### *History of the Success of this Method.*



A V I N G thus described the Method of making this new Operation, and also what is remarkable in the Cure; I shall next (to confirm it) give a short History of its Success; which without ever entring into the Merits of the Cause, will be sufficient to persuade every reasonable and honest Man, that it is the most speedy, safe, and easy Method of extracting the *Stone*, as yet proposed.

*History*



*History of my first Operation.*

On the 23<sup>d</sup> of December, 1719. I made this Operation, the first Time, upon a Boy between sixteen and seventeen Years of Age, and in five Weeks Time he was perfectly cured.

p. 57.

*The natural Figure and Bigness of the Stone.*





*History of my second Operation.*

I made the second Operation *May* the 12<sup>th</sup> 1720. on a Boy of eight Years of Age, and in six Weeks Time, he was perfectly cured.

p. 58.

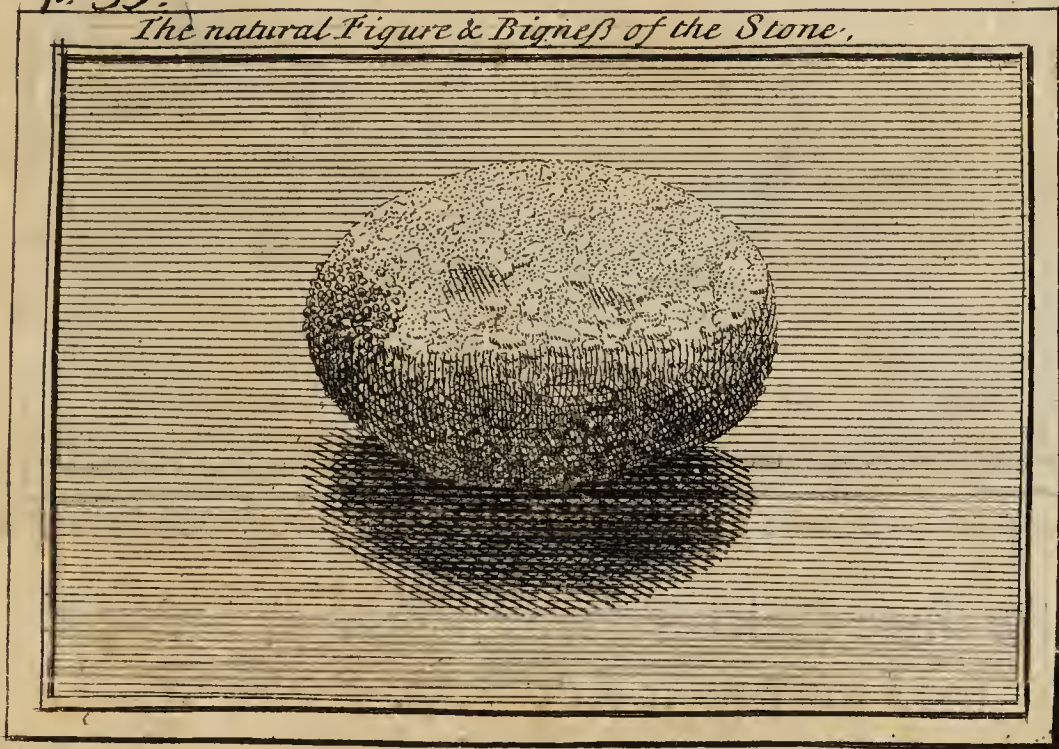
*The natural Figure & Bigneß of y<sup>e</sup> Stone.**History of my third Operation.*

My third Patient was but three Years old, and was cut in *August* 1720. but died of Convulsions about fifteen Hours after the Operation.

*History*



p. 59.

*The natural Figure & Bigness of the Stone.**History of my fourth Operation.*

The fourth Operation was made the 23<sup>d</sup> of *March* 172<sup>o</sup>. upon a Boy between fourteen and fifteen Years of Age, and in four Weeks Time, he was perfectly cured.

In this Patient I made a small Wound in the *Peritonæum*, through which I saw the Intestines present themselves, but I pushed them back with my Fingers, and stitched the Skin, and we had no farther Inconveniency from it; the Boy at this very Time serves Dr. *Stewart* in *Pall Mall*.

These



P. 60.

*The natural Figure & Bigness of the Stone.*

These three Patients were all shewed before the *Royal Society*, soon after their Recovery.

Having thus succeeded three Times in the first four Operations, I was firmly persuaded, that it would prove much more successful, than the common Method; therefore I thought I could not oblige the Publick more, than by communicating it to the Surgeons of the Hospitals, where they have such frequent Opportunities of practising it; accordingly I acquainted them, that I would come and Cut publickly, in either, or both Hospitals, whenever they pleased to give me an Opportunity; but instead of accepting of it, as I expected, they all rejected it with Scorn, as derogatory to the Characters of the *Cutters*, except Mr. *Cheselden*, Surgeon to St. *Thomas's* Hospital, who has always the Good of Mankind more at Heart, than any little private View of his own



“Philosophi enim veri, qui Amore veritatis & Sapientiæ  
 “flagrant, nunquam se tam σοφῆς, sapientia plenos, reperi-  
 “unt, aut suo sensu abundant, quin veritati, a quocunque  
 “& quandocunque venerit, locum dent, nec tam angusti  
 “animi, ut credant, quamvis Artem aut Scientiam, adeo  
 “omnibus numeris absolutam & perfectam a veteribus tra-  
 “ditam, ut aliorum industriæ & diligentiae nihil sit reliquum:  
 “Quum profiteantur plurimi, maximam partem eorum  
 “quæ scimus, eorum, quæ ignoramus, minimam esse. Nec  
 “ita traditionibus & præceptis quorumcunque addicti in-  
 “servire se patiuntur Philosophi, ut libertatem perdant ne  
 “oculis propriis fidem adhibeant: Nec ita in Verbum ju-  
 “rant Antiquitatis Magistræ, ut Veritatem amicam in  
 “apertis relinquant & in conspectu omnium deserant; sed  
 “sicut credulos & vanos omnia primâ facie admittere &  
 “credere, ita manifesta sensui non videre, & luce Meridi-  
 “ana diem non agnoscere, stupidos & insensatos, pariter ex-  
 “istimant; & non minus Poetarum fabulas, & vulgi deli-  
 “rimenta quam scepticorum epochen, in via Philosophica  
 “declinare docent; omnes item studiosi, boni, honestique,  
 “nunquam ita passionibus indignationis, invidiæ, obrui  
 “mentem sinunt, quo minus audiant æquo animo, quæ pro  
 “veritate proferantur, aut rem vere demonstratam intelli-  
 “gant: nec turpe putant mutare Sententiam, si veritas  
 “suadet & aperta demonstratio; nec Errores licet antiquis-  
 “simos, deserere arbitrantur inhonestum: quum optime no-  
 “rint, quod humanum sit errare, decipi; & quod casu  
 “multa reperta esse contingat, quæ discere quivis a quovis  
 “possit,



“ *possit, a Juvene Senex, a stulto intelligens. Nihil cer-*  
 “ *te infelicius iis ingeniis, quæ mordicùs sentiunt, majores*  
 “ *nostros nihil ignorasse. Fallax quippe illud enunciatum,*  
 “ *Famosum impossibile est esse falsum. Profecto ætas*  
 “ *multa docet etiam Hebetiores, quæ sapientioribus anti-*  
 “ *quis incognita fuere: nec natura rerum sacra sua simul*  
 “ *edocet. Veniet tempus, ait Seneca, quo ista quæ nunc*  
 “ *latent, in lucem dies extrahat, & longioris ævi diligentia:*  
 “ *Posterique nostri tam aperta nos nesciisse mirentur. Mul-*  
 “ *ta egerunt qui ante nos fuerunt, sed non peregerunt.*  
 “ *Peregerunt? quam abest? multum adhuc restat operis,*  
 “ *multumque restabit: nec ulli nato post mille secula pre-*  
 “ *cludetur occasio aliquid adjiciendi.*

About a Year ago Mr. *Paul* Cut two in *St. Thomas's* Hospital, who both recover'd perfectly, though one of them was taken with the Small-Pox, eight Days after the Operation.

Upon the third of *May* 1722. Mr. *Cheselden* Cut two Patients after this Manner, and before the Beginning of *August* following, he Cut six more; all which Operations succeeded to the entire Satisfaction of several of the most eminent Physicians and Surgeons in Town, and every one of them recovered. I should have been more particular in the History of these Cases, did not Mr. *Cheselden* design soon to publish an Account of them, to which I refer the inquisitive Reader.

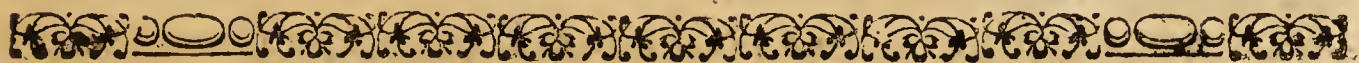
Thus



Thus out of the first fourteen, only one died; yet for all this Success, there are some of our *Cutters*, so bigotted to Antiquity, that they cannot be persuaded to lay aside the old establish'd Method.

From all which, I think, I may safely conclude, in the Words of my favourite Author *Rossetus*.

*Posthac nemini dubium esse debet novam hanc nostram Cystotomiam vetere illa tot Doctissimorum Chyrurgorum Cystotomia (tam periculosa ut eam aggredi vel ipse Hippocrates Chirurgôn Chirurgoatos metuerit) & leniorem & tutiorem haberi.*



## S E C T. XII.

### *Advantages of this Operation.*

**I**T'S Advantages are first, that there's less Danger of Death after it, as is evident from the Success of the beforementioned accidental, as well as artificial Operations.

2. That they can never be made Impotent by it, because none of the genital Parts can be injured.

3. That

3. That an Incontinency of Urine can never be caused by it, because the *Collum Vesicæ* cannot be touched in making it.

4. That there is no Danger of having a *Fistula* after it, if proper Care be taken of the Wound, because it is made in a very fleshy Part, and above the common Passage of the Urine.

5. That there can be no such Force required to extract the *Stone*, as will contuse and lacerate the Parts, because the Passage for the *Stone* may be safely made above five Times larger than it is in the common Operation of cutting on the Staff.

6. That there can be no considerable *Hæmorrhage* for the Reasons aftermentioned.

7. That it is so quickly and easily performed.

8. That those who have been Cut this Way, are as perfectly well, as if they had never been Cut ; which happens very rarely, if ever, after the common Operation.

9. That there is little Danger of breaking the *Stone* in the Extraction, because of the Largeness of the Wound.

10. That there is no Occasion to introduce, and extract such a Load of Iron Ware, *viz.* *Gorgerets, Conductors, Forceps, Dilators, Scoops, Crotchets, &c. Tab. i.* as in the common Method, which occasions many grievous Accidents, as beforementioned.

11. That you can find the *Stone* immediately, though ever so small, which often requires a great deal of grubbing in the common Way.

12. That



12. That (supposing the *Stone* should be attach'd to the *Bladder*, and not discovered before the Operation) you may easily discover with your Fingers, before you attempt to extract it, if it's a small or large attachment; if small, you may separate it with your Fingers, and then extract the *Stone*; if large, you may leave it there, and heal up your Wound, whereby the speedy, nay, immediate Death of the Patient would be prevented, which cannot be done in the common Operation, because their Forceps has no feeling, &c.

13. That we are in no Danger of pinching the *Bladder* with the Forceps, in searching for the *Stone*, or of taking hold of the *Bladder* along with the *Stone*, and tearing them out together, whence certain Death, as has often happened in the common Operation.

14. That the Cure is sooner compleated, &c.



## S E C T. XIII.

*Objections against this Method, formally answered.*

**C**ANERE meditabar receptui, sed rebellant Quidam procaciter irridentes nostram hanc Operationem; sic ut in eos nova arma parantes novis Armis mihi pugnandum esse videam, ne triumphum ante Victoriam cecinisse accuser. Rosset.

Notwithstanding all the forementioned Success, yet there are some who still make the following Objections.

*Obj. 1.* That the Guts will burst out at the Wound.

*Ans.* The Intestins are kept from bursting out at the Wound by the *Peritonæum*, which is situated between the *Bladder* and the Bowels as before described.

*Obj. 2.* That the Urine from the *Bladder*, and the discharge from the Wound, will flow into the Cavity of the *Abdomen*, where corrupting, will occasion several grievous and incurable Symptoms.

*Ans.* This is also prevented by the forementioned Situation of the *Peritonæum*.

*Obj. 3.* That the Urine from the *Bladder*, and discharge



charge from the Wound will fall into the Cavity of the *Pelvis*, and by corrupting occasion Death.

*Ans.* If the Body of the *Bladder*, which is always attached to the neighbouring Parts, as before described, is not separated from them in the Operation (which cannot be done, but by the Fault of the Operator) this Accident can never happen.

*Obj.* 4. That Wounds in the membranous Part of the *Bladder*, are mortal.

*Ans.* The Body of the *Bladder* (which Authors erroneously call it's membranous Part) is covered with a thick and strong *Muscle* called *Detrusor Urinæ* (before described) without which it would be impossible to make Water with that Force we do, or to heal it's Wounds with so much ease and firmness, as daily Experience shews.

*Obj.* 5. That there will happen a considerable *Hæmorrhage*.

*Ans.* The Incision being made exactly in the middle as above directed, there can be no Vessels Cut but the most minute *Capillaries*, which I never observed to yield, but a very small Quantity of Blood.

*Obj.* 6. That though the Wound is cured, yet the Patient would never be able afterwards to contain one tenth Part of the Urine he did before, which may occasion several other Distempers.

*Ans.*

*Ans.* This was first dreamed by Mr. *B——t*, and as a Dream I leave it, having never heard of such an Accident happening to any of those that have undergone this Operation, except to the Bitch on which he made his Experiment.

*Obj.* 7. That being contrary to the Opinion and Practice of all the *Lithotomists* in *Europe*, it cannot be good, else it would have been practised of before.

*Ans.* The received Opinion is never the more true, merely for being established. *E. G.*

Before Dr. *Harvey*, we were all ignorant of the Circulation of the Blood.

Before *Ambrose Parey*, of the Use of the Ligature after Amputations.

Before Dr. *Highmore*, of the large Cavity in the upper Jaw.

Before Mr. *Cowper*, of the Operation that may be made upon the aforesaid Cavity.

Before Monsieur *Petit*, of the Use of the *Muscles* in reducing *Luxations*.

All these and many others that might be mentioned, were all thought very strange, and out of the way Things, at first, but a little Consideration, Examination, and Experience, forced People to believe them, tho' ever so contrary to the received Notions.

*Obj.* 8. That this is not a new Way (as is pretended) but an old Operation revived, which was long ago practised in *France*, and left off, because of it's bad Success.

*Ans.*



*Ans.* The Safety of this Operation depends entirely on filling the *Bladder* with some Liquor, which was never performed on a living Body before I did it, and therefore I insist on it, that it is a new Operation, until they make it appear when, and by whom it was done before. But supposing it had been attempted, as they pretend, five hundred Times in *France*, and always miscarried, then it's plain (from my Success) that they did not understand what they undertook: And supposing that they always succeeded, then it's certain that our *Cutters* never heard any Thing of it, otherwise, they cannot well answer for not putting it in Practice sooner, by which the Lives and Health of many might have been preserved, that fell a Sacrifice to Antiquity.

This is fully confirmed by the following Story, &c.

When I presented the first two Patients I had Cut, before a very publick Company, the Physicians then present were all very well pleased, both with the Newness of the Method, and Compleatness of the Cure: But when one of the *Cutters*, that was present, had viewed the *Cicatrices* of the Wounds, he very modestly asserted that they appeared to him to be made with *Causticks*; (by which he insinuated that there had never been a *Stone* drawn through these Wounds, but that I had only hired the poor Boys to permit a *Caustick* to be laid on, and then shewed the *Cicatrices* to impose on the World) upon which I told him, that it gave me very little Concern how they appeared to him, because it did not at all alter the Case; however, I as-

T

sured



ured him that I made an Incision, where he saw the *Cicatrices*, as deep as the Cavity of the *Bladder*, and drew the *Stones*, then on the Table, thro' the Wounds. If he would not believe me, I desired him to ask the Patients themselves, one of which was betwixt seven and eight Years of Age, and consequently could not keep such a Secret as he supposed; and the other was between sixteen and seventeen, and consequently was able to give a reasonable Account of what was done to him; but if he would not depend on their Words, he might ask a Physician then present, who saw one of them Cut. Each of whom affirmed the Truth of what I had related, notwithstanding of all which, he still persisted in saying that these *Cicatrices* appeared to him to be made with *Cauticks*, which shews how little that great Man was acquainted with either artificial, or accidental Wounds of these Parts, and also how unwilling he was to allow any Thing to be true, tho' never so well attested, that seem'd to oppose his set of establish'd Notions.

*Infælix eorum Ignorantia, qui ea damnant quæ non intelligunt.*

From all which it's very evident, that tho' this may not be a new Discovery in *France*, *Holland*, or *Muscovy*, yet it's perfectly new in *England*.

*Obj.* 9. That tho' it succeeded in Boys, yet it wont in Men.

*Ans.* Before I made this Operation, it was the universal Opinion of the Surgeons, that it was impracticable in either  
ther



ther little or great Bodies: But now I have succeeded in small Bodies, they say I cannot make the Operation, or it wont succeed in Men.

I have a great deal more Reason to differ from the received Opinion in this, than I had in the former Case, because I am persuaded (by the Experience I have already had) that I can cut Men after the same Manner, with as much, if not more Ease than Boys; and that the Cure would succeed as well, I think, is very evident, from the forementioned Instances of random Wounds of the *Bladders* of Men, made with Swords, Bullets, &c. being happily and perfectly cured.

By the dexterous Management of this Argument, I lost a very good Patient in *April* last, and the poor Gentleman (in all human Probability) his Life.

*Obj.* 10. That the common Passage of the Urine being useless for so long a Time, the Gravel, Slime, and clotted Blood having no Vent but thro' the Wound, must subside, and may form a new *Stone*, whilst you are curing the Wound.

*Ans.* This is a very plausible Objection, but Experience shews there's nothing in it.

*Sed valeant istæ ex fragmentis Authorum, &c. quæsitæ obiectiunculæ quando secus esse oculari fide docemur.* Rosset.

## S E C T. XIV.

*Various Causes of Death, which cannot be attributed to the Operation.*

**W**HEN the Operation is not made as it ought to be, it's certainly the Fault of the Operator, but suppose it's made with the desired Success, yet the Patient may not recover afterwards for the following Reasons, *viz.*

1. When there happens to be *Stones* also in the *Kidneys*, or *Ureters*.
2. When the *Kidneys*, *Ureters*, or *Bladder*, are ulcerated, or imposthumated.
3. When the Constitution of the Patient is broke by too long delaying the Operation, or by taking vast Quantities of Stuff, in hopes to dissolve it.
4. When the Patient is too old, or too young.
5. When the Patient is subject to Convulsion Fits beforehand.
6. When any other considerable Disease troubles the Patient at the same Time.
7. When the *Stone* is monstrous large.
8. When they are not taken due Care of afterwards, &c.



## S E C T. XV.

*Where to make the Punction of the Bladder in  
a Suppression of Urine.*

**I**N a total Suppression of Urine, the *Bladder* is to be punched by the *Trocquart* and *Canula*, in the same Place where the Operation for the *Stone* is made, and is preferable to the Punction of the *Perinæum*, for the same Reasons that the high exceeds the low Operations.



## S E C T. XVI.

## C O N C L U S I O N.

**H**AVING thus evidently proved from Reason and Experience, that this Method is not only new, but preferable to all others; I shall conclude with *Marianus S. B.* Advice to those that have a Mind to study *Lithotomy*; and *Rossetus's* Wish for the farther Improvement of this Operation.

“ *Qui hanc Artem exercere voluerint, ne dedignentur,*  
 “ *si ipsam ignoraverint, sibi aliquem præceptorem parare,*  
 “ *à quo modum operandi & utendi Instrumentis fideliter*  
 U “ *ediscant:*

“ ediscant : cum talismodi Operatio non circa brutā, sed  
 “ rationalia Animalia versetur, quæ circa si qui, quod  
 “ necessarium esset, hallucinarentur, ad Charonta miser-  
 “ rimū hominem migraturum propria ignavia crucia-  
 “ bunt, pro cuius vindicta non solum Cæli, elementaque  
 “ aderunt, sed imposterum Cruciatus Gehennæ. Marian.

“ Qui melius, facilius, compendiosius & tutius commen-  
 “ tari ad hoc quidpiam poterit, id bona fortuna & sine  
 “ invidia ad publicam utilitatem faciat opto. Rosset.







# APPENDIX.



R. *Rossetus's* Book *De Partu Cæsario*, (in which he proposes this new Method of Cutting for the *Stone*) being so very excellent, and so very hard to be met with, I thought I could not oblige the Reader more than by reprinting, all that he says about it, in the same Order it was wrote; that thereby every one may see, what an inestimable Jewel has lain neglected, for above one hundred and thirty Years, in the Dust of Antiquity; and there it might still have lain, had not I both improved, and successfully executed his Design; by which, we ought to be encouraged to search more carefully (than hitherto we have done) into the Relicks of those Antient and divine Men, instead of contemning them, as the Fashion is among those who know little, and have read nothing; and who knows what farther Discoveries may soon be made?



*De Analogica Comparatione uteri secti cum incisione vesicæ calculosæ.*

**I**GITUR nunc comparemus nostram hysterotomiam  
 “ rari, sed nonnunquam necessarij operis exemplum  
 “ cum utriusque generis cystotomia vetere scilicet, ac nova ;  
 “ frequente quidem utraque, sed sæpe non valde necessaria,  
 “ sæpissime vero mortali. Suspectior enim utraque est  
 “ multis de causis nostra sectione : attamen hinc non pau-  
 “ ci evadunt spem meliorem nostro operi promittentes.

“ Primum enim hic dividitur quidem uterus sed qui pars  
 “ est mulierum individuo non multo magis necessaria, quam  
 “ fortasse suum unicuique viro scrotum. (nam hic de te-  
 “ sticulis sciens taceo, nimirum parte inter principes à mul-  
 “ tis numerata, deque ipso cole, quibus tamen omnibus  
 “ Asiaticorum eunuchi gravissimis quibusque laboribus ad-  
 “ dicti facile carent.) Illic autem vesica (citra cujus perpe-  
 “ tuum ministerium ne horulæ quidem momentulo inculpa-  
 “ te vivere quisquam potest) atrociter perniciosæque vulne-  
 “ randa proponitur. Id autem ita se habere vel ex Galeno  
 “ constat, libro de sectione vulvæ. [Cum vesica (inquit)  
 “ ad portionem omnium aliarum partium augeatur, ut quæ  
 “ omnibus ætatibus æqualiter serviat, matrix, neque dum  
 “ adhuc augentur animalia, neque dum jam senuerunt ne-  
 “ cessarium habet, ut actionem suam obeat. Sed nec obit  
 “ quidem semper (tempore ad foetificandum idoneo) rite.]

“ Hæc



“ Hæc ille. Inde est opinor, quod is cum Hippoc. aphor.  
 “ 18. lib. 6. connumerans partes non citra perniciem inci-  
 “ di solitas utpote vesicam (primo loco) cor, diaphragma,  
 “ & cæteras, uteri tamen non meminerit.

“ Secundo matrix post solerter apertam in abdomine gra-  
 “ vidæ, & frustra parturientis foeminæ latam velut fenestram  
 “ facta conspicabilis, seipsam chirurgo vel nolenti primam  
 “ obtrudit, quo illi placet loco, spatioque oculis confide-  
 “ randam, digitis notandam, & ferro manibus cautis ap-  
 “ tato secandam; idque evidentissime, nempe cum enor-  
 “ miter turgēt parturienti. Vesica autem in utroque com-  
 “ muni modo operandi (nam alium introducere medita-  
 “ mur) integro abdomine profundissime sub osse pubis la-  
 “ tens, vacuato per intromissum catheterem (ut fit ante  
 “ sectionem) lotio magis tunc quam antea detumescit, &  
 “ flaccida redditur, sic ut sensum peritissimi cujusque ope-  
 “ ratoris non raro effugiat. Unde fit ut calculus sæpe gran-  
 “ dis nec digitorum, nec catheteris percunctatione certò de-  
 “ prehendi possit, (rugis forsitan depletæ & contractæ ejus  
 “ intervenientibus) aut deprehensus parti secandæ admove-  
 “ ri nequeat, aut admotus præhendi non possit, aut præ-  
 “ hensus auferri non sustineat, tum præ sui magnitudine,  
 “ tum præ emissarii etiam quamlatissime per securitatem li-  
 “ cet facti angustia, nempe strictiore, quàm ut per eam de-  
 “ trahi lapis sæpe non unus speretur; sic adeo ut sit tunc  
 “ incepto desistendum, vel quampericulosissime amplian-  
 “ dum vulnus, resumpta novacula, vel dilatatorio violen-  
 “ tissime divellenda pars non modo colli vesicæ multa, sed  
 “ corporis



“ corporis etiam membranei non exigua, ut in eorum fre-  
 “ quentissimis cadaveribus videre est, quos eo laniatu excar-  
 “ nificatos fuisse quotidie conspiciamus, mille prorsus modis  
 “ graviore, quam esse possit abdominis, peritonæi, uterique  
 “ sectio tota.

“ Terrio vesicam ibi (ut vulgo fit) secturos non modo  
 “ venas, & arterias parti secandæ ac vicinis plerisque perne-  
 “ cessarias, multas sane, nec parvas præscindere oportet,  
 “ sed etiam sphincteris vesicalis, aliorumque musculorum  
 “ & perinæi fibras, ut de aliis quibusdam corporis instru-  
 “ mentis, deque ipsis adeo virorum genitalibus vasis, eo  
 “ fere pertinentibus, & ibidem lædi obnoxiiis, deque recto  
 “ intestino sæpe varicibus, condylomatibus, & hæmorrhoidi-  
 “ bus turgidis laborante taceam. Qui verò uterum secat,  
 “ talium partium offensionumque securus operatur, si quod  
 “ de venis & arteriis in secunda tractatione satis probatum  
 “ est, rursus in dubium non revocatur.

“ Quarto, mox ubi alveolati catheteris intromissione,  
 “ novaculæ vulneratione profunda, & dilatantis organi dila-  
 “ ceratione carnificiaria ægre tandem patefactus in vesicam  
 “ ingressus est, & procuratum non unius generis ferramentis  
 “ loco tam periculoso emissarium, ut per id extrahendis  
 “ grandibus & sæpe numerosis saxis via vi fiat, quantæ (per  
 “ Æsculapium) & molis, & doloris, & novi periculi rursus  
 “ esse comperitur, illas rupes in suis fodinis vagantes, &  
 “ uncum forcipemve sæpe eludentes, caute (ut decet) præ-  
 “ hendere, sensim emovere, apte subvolvere, inoffense ex-  
 “ trahere? Id fit (inquies) sedulitate quanta licet maxima.

“ Fit



“ Fit sane (lector humanissime) & ignoscendum fateor si  
 “ parum vel sic id fit bene, quando melius fieri non posse  
 “ putant, quod quomodocunque fieri necesse est. Certe  
 “ parum facili negotio, & minus adhuc tuta spe talis perve-  
 “ stigatio machinarum ferrearum percunctatione facta, nec  
 “ aliter certo fieri patiens, multo plures post se calamitates  
 “ comites habere solet, easque primis immaniores, adeo ut  
 “ sæpæ contingat præhensam his, atque illis instrumentis  
 “ cum calculo partem vesicæ non paucam lacerari, & tam  
 “ conspicue cum eo agnitam extrahi, ut inde necessarius ar-  
 “ guatur successisse interitus: cujus maleficii criminatio-  
 “ nem quia aliter effugere nequeunt, eludunt sæpe artifices  
 “ composito ad id figmento pelliculæ scilicet nescio cujus  
 “ calculos crescentes vestientis.



*Vasrum esse figmentum, calculos vesicales mem-  
 branis circumvestiri.*

“ **S** E D qua obsecro ex materia, aut quomodo tales tu-  
 “ nicæ in eo spatioso, & libero vesicæ capacis loco  
 “ crescere possent, ut isti causantur? Aggestune pituitosæ  
 “ materiæ illuc cum lotio venientis? Illud opinor nemo  
 “ concedet, licet inde fiant crescantque calculi, à regimine  
 “ naturæ bene operantis destituti. Nam veluti cum lotio  
 “ venit ea pituita, illique toti ea tota intra vesicam permis-  
 “ cetur, sic etiam cum ea confusa effluit (licet postea ab  
 “ emissionem



“ emiſſione ſeorſum ſubſideat) nec ei mora ſuppetit ſuffici-  
 “ ens, & neceſſaria, ad converſionem ejus in pelliculam,  
 “ aut pelliculæ in concretionem cum veſica ſimul & calculo  
 “ ut contingit aliis compluribus in locis, ipſoque interdum  
 “ utero ait Hippoc. epid. 5. in quibus calculi nonnunquam  
 “ fiunt ex tenace humore diu deſidente, & tandem affixo,  
 “ non autem vago, & cito tranſfluente, ut fit in horas per  
 “ veſicam. Præterea quis unquam ex ea pituita (conſoli-  
 “ dationes, ne dicam aſſimilationes, & concorporationes  
 “ ſemper impediende, cicatricesque ac multo magis mem-  
 “ branas fieri generarique vetante ad quas deſiccatio requiri-  
 “ tur) aliquid membraneum fieri vel vidit, vel ſcripſit, vel  
 “ imaginari poteſt? Cedo enim ubi ejus membranæ calcu-  
 “ lum veſtientis, aut veſtituræ origo, & baſis futura eſt? ad  
 “ calculumne, an veſicam? Si enim ad calculum corticis  
 “ ſuperadditi modo grandefcentem ea baſis pertineat, quæ  
 “ nam calculos, quibus adhæret, & quos undique ambit  
 “ crefcere non vetabit, cum tamen crefcant? Media enim  
 “ interjacebit inter ipſos, & pituitoſas materias calculis aug-  
 “ mentum præbentes. Sed quis ex ſaxo membranam fieri,  
 “ aut ex eo naſci tunicam ullam nugabitur? Si autem ea  
 “ baſis membranæ calculariæ ex ipſiſſima veſica naſcitur,  
 “ quæ fiet ut ejus adhuc naſcentis, & puſillæ indumento ullus  
 “ omnino calculus tegatur? Sed ut parvæ & mediocres la-  
 “ pidem magnum non caperent, exiguum vero non ſine-  
 “ rent adaugeri, ſic eædem mediocres, & magnæ ex veſi-  
 “ cali ſcilicet corpore productæ, crefcentem (ſi diis placet)  
 “ intra ſe calculum conciperent, cujus tamen materia ſta-  
 “ tuitur



“ tuitur pituitosus, & tenax humor, qui nisi calculo jam  
 “ incepto aggeretur, crescere nequit: ejus autem aggesti-  
 “ onem ex tunicæ illum involventes impedirent. Sed quis  
 “ à principio ullam magnam dixerit membranam? nempe  
 “ quanta fingitur magnos calculos complecti? Præterea, si  
 “ ante calculi in seipsam ingressum membrana magna fuit,  
 “ quo favore rumpi voluit ut patefcens grandem calculum  
 “ acciperet? quem rursus si accepisse somnietur, quomodo  
 “ iterum connivere poterit, ut eundem intra se undique  
 “ claudat, aut si eum circumcirca ambiat, quomodo eum  
 “ deinceps partibus vicinis non facit esse innocuum? Dicent  
 “ fortassis ex ea pituita illas fieri. Bona verba. Nam quis  
 “ ex ea mere excrementitia membranas istas tam solidas vul-  
 “ go apparentes, ut à vesicarum corporibus non dif-  
 “ tent, & à calculis rumpi, & atteri nequiverint,  
 “ fieri generarique posse dixerit: si verum est orta quævis  
 “ suis principiis respondere? Non enim videtur ulla earum  
 “ membranarum quas isti impostores (pace bonorum dic-  
 “ tum sit) nobis obtrudunt, diversa esse à solido vesicarum  
 “ in recenter mortuis inventarum corpore, & substantia,  
 “ qualem (nempe spermaticam) à meris excrementis gene-  
 “ rari nemo medicus fatebitur, cum nec ab iisdem solis fiant  
 “ hypersarcoses flaccidæ, & insensiles, nisi simul accedat be-  
 “ nigni, & prope assimilandi alimenti affluxus: Quanto er-  
 “ go minus tam solida membranarum (ut vocant) corpora  
 “ inde conflabuntur, adeo matrici hærentia, ut non nisi  
 “ matrice sequente cum vita avelli possint? Ad hæc, quid  
 “ tunc vesicali sectione opus esset, si calculus membrana



“ vestiretur? nam ea molliculo lævore suo, calculi cum ve-  
 “ fica contactum, attritionemque prohiberet, & consequen-  
 “ ter dolorem auferret, qui tamen tunc est intolerabilis, ut  
 “ ex eo solo maxime patet, quod miseros calcularios in hoc  
 “ sectionis præcipitium, velint nolint, adigit. Sed hoc præ-  
 “ cipue (illis ipsis iudicibus) eorum mendacium aperte con-  
 “ vincit, quo illa sua homicidia excusant. Omnis enim  
 “ calculus quem extrahunt, ab iis prius quam extrahatur so-  
 “ let depræhendi ejus ad catheterem sonoro illisu. (Alio-  
 “ qui enim ne id quidem tentant) Atqui nullus membrana  
 “ circumvestitus calculus potest deprehendi eo ad cathete-  
 “ rem illisu sonoro, (interposita enim membrana id vetat.)  
 “ Nullus igitur ab iis extrahitur membrana circumtectus  
 “ calculus. (Quicquid nobis contrà garrere velint.) Sed eam  
 “ illis excusationem relinquo, precario donans mentientibus  
 “ tales tunicas in vesica aliquando reperiri, quæ calculos lo-  
 “ ricent. Certe eo ipso quod hanc operationem eorum sen-  
 “ tentia difficiliorem adhuc, imò vero mortalem nobis fa-  
 “ ciunt, proposito nostro allegorico validius patrocinium  
 “ accedit. Hic enim calculus ad vesicam ex hypothefi con-  
 “ corporatus, non nisi cum ipsa vesica, aut ejus bona parte  
 “ perniciose extrahi patitur. At uterus noster sectus mox  
 “ per plagam vixdum absolutam, sed duntaxat medio de-  
 “ signatæ ad oculum sectionis spatio inceptam explodit suâ  
 “ sponte foetum, non modo si mortuus jam est, auxilium  
 “ manus sequentem, sed multo alacrius, si adhuc vivit, ut-  
 “ pote auras ultro affectantem, & conantem (quacunque li-  
 “ cet) egredi: quod ubi factum est, matrix sese in arctum  
 “ cogere



“ cogere festinat, nullius ut dictum est futuræ, & propemo-  
 “ dum externæ opis egens. Sed ad rem intermissam revertor.  
 “ Quinto igitur notum est, tam ex membraneo in calcu-  
 “ losorum viventium urinis pure, quàm ex contemplatione  
 “ vesicarum intra eorumdem cadavera, vesicas rarissime ca-  
 “ rere ulceribus factis à lapide jamdudum adaucto, & sæpe  
 “ scabro, inæquali, aculeato, spinoso: utque ante sectio-  
 “ nem ulceribus caruerint, tamen omnino futurum est, ut  
 “ iis sint laboraturæ, idque eo loco, in quem præter partis  
 “ affectæ pus, sentina totius corporis velut in publicam clo-  
 “ acam corivatur: à cujusmodi sordium illuvie, quam sint  
 “ ea ulcera curatu difficilia, indicat miserabilis illa, & ubi-  
 “ que frequens multorum calculosorum (qui secti sunt) que-  
 “ rela, de perpetuo urinæ per perinæum stillantis impluvio,  
 “ ne quis mihi postea mearum Cæsarearum hernias expro-  
 “ bret, leve certe præ ista calamitate malum, & si non evi-  
 “ tabile, tolerabile tamen. Uterus autem Cæsarearum sa-  
 “ nus, & vicens, quo est intus positus, non habet quibus  
 “ ex locis supra sui sectionem positis excipiat inferioris situs  
 “ ratione fluxionem excrementorum, in eam sui partem,  
 “ quæ excisa est, & uniri festinat; imò vero foras depositu-  
 “ rus est sponte, cito, facile, innocenter, sordes emanaturas  
 “ ex fauciato loco, ulceribus inimicas, vicina, declivi, sibi-  
 “ que subjecta, & tunc latissimè patente pudendorum puer-  
 “ peræ via.

“ Sexto, cum exploratissimum sit uteris parturientium  
 “ mature, prudenterque sectis incolumes superesse suas acti-  
 “ ones in foetificationibus sequentibus (nisi quid aliud à sec-  
 “ tione



“ tione obsit) contingat autem quam sæpissime apertis sc-  
 “ mel calculosis, ut non modo perinæo coalitum ob supra-  
 “ dictas causas recusante, urina odiose tota vita ibi perfluat,  
 “ sed etiam sphinctere vesicali (cujus functio est contractu  
 “ suo lotium retinere) lacerato, secto, rupto, nec sibi re-  
 “ stituto, ob idque officium suum vix unquam facturo, urinæ  
 “ per colem incontinentia molestissima sit, nemini dubium  
 “ esse debet novam hanc nostram hysterotomiam veterem il-  
 “ la tot doctissimorum chirurgorum cystotomia (tam peri-  
 “ culosa ut eam aggredi vel ipse Hippocrates chirurgôn chi-  
 “ rurgotatos metuerit) & leniorem, & tutiorem haberi, ne  
 “ etiam prorsus utiliore, magisque necessariam adjiciam :  
 “ præsertim, cum hæc citra geminæ mortis interminationem  
 “ parturientibus nunquam aliter parituris jamjam fieri impe-  
 “ retur: illa autem vel quandiutissime differri, vel sæpe om-  
 “ nino prætermitti patiatur, idque sæpe non valde magno  
 “ dispendio sanitatis eorum, qui eam respuunt. Sunt enim  
 “ qui eandem subeant leviculi interdum mali tædio, aut di-  
 “ uturnæ molestiolæ metu potius, quam necessitate coacti :  
 “ licet quibusdam misera crux vocetur, & sit. At novi qui-  
 “ bus per triginta, & eo plures annos (ut ex signis patho-  
 “ gnomonicis jamdudum constiterat) calculariis, non misere  
 “ vivere contigit, quibus alio quodam fato mortuis, & aper-  
 “ tis calculi in vesica non exigui inventi fuerunt. Attamen  
 “ sunt etiam inter eos qui leviter eo morbo laborant, non-  
 “ nulli qui mali crescere minantis metu satis levi perterrefac-  
 “ ti, id tormenti subire non recusent, funesto tamen, &  
 “ frequente omnis ordinis, sexûs, ætatisque exemplo. Inde  
 “ forsitan



“ forsitan est, quod Hippoc. (ut aphor. 18. lib. 6. scripsit)  
 “ vesicam sauciatam sanari posse desperans, calculosos nec  
 “ ipse curandos secare suscepit (suo nomini in re tam pe-  
 “ riculosa premetuens, idque opus sine invidia iis permit-  
 “ tens qui illud exercere profitebantur contentus modeste  
 “ suam Spartam tueri) nec à suis jureiurando solemni vetitis  
 “ sit passus obiri; licet post eum aliquot celebres chirurgi,  
 “ & medici id ausi sint, editis etiam in eum finem libris, ex  
 “ quorum monumentis desumpta sunt quæ Celsus Latinus  
 “ Hippocrates dictus, & Ægineta, atque alii eos sequuti de  
 “ hoc chirurgemate prodiderunt, sed tunc adhuc valde fri-  
 “ gide, ut ex eo constat, quod infra novem, & supra qua-  
 “ tuordecim annos, eam curationem ne tentandam qui-  
 “ dem esse velint, cum tamen hodie à tribus mox, & infra  
 “ annis ultra septuagesimum id fiat. De qua tam brevi  
 “ apud Celsum ætatis ad calculos eximendos concessæ præ-  
 “ scriptione, ejusque ratione problema, & ejus arbitrium  
 “ ad hujus opusculi finem rejeci.

\*\*\*\*\*

*Ex auctario; facilius, & tutius per imi abdomi-  
 nis sectionem, quam per perinæi excarnifica-  
 tionem calculos è vesica extrahi posse, & ad  
 hoc historiae tres.*

**D**UO usurpari hætenus consueverunt sectionis calcu-  
 lariae modi. Vetus Celsi, & priscorum eademque

Z

“ Guidonis



“ Guidonis & recentiorum, ac nova Marinii Bartolitani.  
 “ Hæc omni in ætate administratur, illa non nisi à nono ad  
 “ decimum quartum olim fiebat, postea tamen aliis etiam  
 “ in ætatibus usurpata est. Nova autem ideo excogitata  
 “ fuit, tum quia miserandum videbatur calcularios omnes  
 “ ante novennium, & post decimum quartum annum pro  
 “ deploratis relinqui, tum quia faciliior, & tutior priore cre-  
 “ dita est. Sed utraque ejusdem loci ad perinæum sectione  
 “ obiri consuevit. In ea autem quam proponimus alium  
 “ locum aperiendum esse, idque tutius, & facilius docere  
 “ meditamur. Tot ergo, tamque gravibus causis metuendi  
 “ ab utraque hac tam formadibili cystotomia adductus, &  
 “ miseratus hinc lethales multorum alterutro modo secto-  
 “ rum cruciatus, illinc plurium langores perpetuos, secari  
 “ quidem debentium, sed iis vestigiis à sectione deterrito-  
 “ rum, quæ plurima cystotomos versus, pauca vero retror-  
 “ sum spectare solent, persæpe cogitavi de alia quadam mi-  
 “ tiore cystotomias administratione. Uni enim vitio variis  
 “ remediis obsistere fas, & jura medicorum sinunt. Modo  
 “ ut quam facillimis & tutissimis id fieri potest certatim ten-  
 “ tetur. Si autem vetus illa Celsi, & Guidonis in Marinia-  
 “ nam transiit, cur non etiam ipsa in meliorem (ut spero)  
 “ vertetur? Explorata porro tandem hujus sectionis Cæsa-  
 “ reæ veritate, & sumpta ex partibus quas utrobique incide-  
 “ re oportet indicatione, per abdomen cystotomiam absol-  
 “ vi foeliciter posse jamdudum augurabar. Sed operis no-  
 “ vitas, & thrasonum quorundam os infræne, mihi silenti-  
 “ um imperabant.



*Historia Prima.*

“ **I** NTERIM incidi commodum in quendam Petri  
 “ Franconis libellulum de Herniis gallice inscriptum,  
 “ ubi celeberrimus ille Iatrocelicus historiam memorabilem  
 “ contexit cujusdam bimi infantuli, vesica per divisum á se  
 “ juxta pubem hypogastrium aperta à calculo liberati, obse-  
 “ crantibus ideo id parentibus, quòd aliter ei sectori nihil  
 “ successerat, omnia prius frustra experto, ut ad perinæum  
 “ calculum admoveret. Id vero unice miror, cur deinceps  
 “ id tentari dehortetur. Invidetne hominum societati bo-  
 “ nus ille vir eam inventi (licet fortuiti & coacti) foelici-  
 “ tatem? aut sibi, & collegis esuritionem præmetuit? aut  
 “ notam ipsorum censoriam, & ab eorum symphratria, &  
 “ collegio exilium formidat, tanquam cornicum oculos con-  
 “ fixerit? Quidnam enim postea id jam usu cognitum pro-  
 “ fuisse, rursus profore vetabit, viribus ægri constantibus,  
 “ quod attritis iisdem misere vexato, jamque semineci infan-  
 “ tulo, profuisse constitit, aliis omnibus frustra tentatis?  
 “ Dissuadet opinor, quod infantulus ab eá sectione ægrotá-  
 “ verit: atqui nisi prius idem graviter ægrotavisset, eò ven-  
 “ tum non fuisset. Interim cogitandum est quin male ha-  
 “ buerit fieri non potuisse, sed mirandum etiam quod pejus  
 “ ei non fuerit, cum bimulus tantum esset, cum diuturno  
 “ dolore fractus, cum recenter antea fatigatus, intromissi-  
 “ one precedente digitorum sectoris crassorum in ægrotantis  
 “ tenellum podicem, & appressu pugni ejusdem in hypogas-  
 “ trium,



“ trium, ut solent in eo ipsorum veteri opere : quæ omnia  
 “ illum potius, quàm sectio hypogastrica affligere, & mi-  
 “ rum etiam cur non ad mortem cogere potuerunt.



*Secunda Historia.*

“ **S**ED ne quis objiciat non uni duntaxat obscuri forsan  
 “ artificis experimento fidendum esse in re tam peri-  
 “ culosa, & ad omnes ex æquo ordines pertinente, audiat  
 “ id quod nuper Franconi non infoeliciter successit, etiam  
 “ olim antea fauste successisse (ut à quibusdam interpreta-  
 “ tum fuit) in totius orbis celeberrima medicorum Parisien-  
 “ sium schola, idque Regis, ac Senatus auctoritate tam  
 “ solemmniter, ac palam, ut in publicas historias regeſtum  
 “ id fuerit à Monstreleto rerum sui temporis Gallicarum no-  
 “ bilissimo tunc historiographo. In cujus tamen scripti ve-  
 “ ram interpretationem quid utramque in partem probabilius  
 “ differendum, tandemque certo constituendum nunc pu-  
 “ tem, cûrve id opus per imum ventrem (ut quibusdam &  
 “ mihi ipsi aliquando visum fuit) captum, peractumque fu-  
 “ erit, brevi ac dilucido problemate in hujus opusculi calce,  
 “ majore otio examinabo.

“ Militarem arcigerum Mudonensem (*Franc archer de*  
 “ *Mudon* Galli vocant) ob latrocinia furcis adjudicatum  
 “ medici Parisienses calculo laborare cum rescivissent, à re-  
 “ ge, & senatu sibi vivum donari obtinuerunt, ut in eo pub-  
 “ licæ utilitatis causa aperiendo, periculum facerent calculi,



“ novo (ut credi par est) & mitiore, ac tutiore quam prius  
 “ modo extrahendi: impetrato illi à Rege (si superstes eva-  
 “ deret) vitæ beneficio, & à schola liberali aliquo munere,  
 “ pro ea tolerantia proposito. Quo facto intestinis (ut  
 “ vult historicus) repositis, plaga confuta, sanitateque resti-  
 “ tuta, vitam sibi ea patientia cum donario redemit. Ali-  
 “ quid miræ raritatis fuisse oportet, quod memoriæ manda-  
 “ ri dignum censuerit historicus. Nam & Paræus de mon-  
 “ stris scribens, lib. 24. sui operis, mentionem ejus velut  
 “ miraculi facit, quod tamen mirandi nihil habet ut postea  
 “ docebimus. Eo igitur Franconis exemplo contentus, ad  
 “ rationes exemplis quibuscumque non inferiores accedo, qui-  
 “ bus innituntur fiducia subvertetur, qui vesicalem calculum  
 “ ea quam eligimus parte extrahi posse pertinacissime negant.



*Solutio quarundam objectionum in cystotomiam hy-*  
*pogastricam productarum.*

“ **C**ONTROVERSIAM movent, quòd locus in hypogastrio  
 “ quantumlibet imus, longe à collo vesicæ abest,  
 “ prope quod calculus sedet, & unde ad vulnus superius ex-  
 “ terne factum subduci non poterit, ut eo patente exima-  
 “ tur. At vero si pateat satis plaga, ut per eam intromissi  
 “ alterutrius manus digiti vel forceps ad id accommodus cal-  
 “ culum contrectare & prehendere possint, subjectis ad po-  
 “ dicem alterius manus digitis, sursum ad plagam usque  
 “ subducetur,

A a



“ subducetur, per eam tunc facile extrahendus, præsertim  
 “ si vesica ante sectionem humore oppleta, supra pectinem  
 “ (ut post dicetur) submota fuerit. Alterum est quod op-  
 “ ponunt, nempe priore illo dato, fieri tamen non posse,  
 “ ut accepta ubicumque velim plaga in hypogastrio, perti-  
 “ nere possit ad vesicæ collum, aut sphincterem aperiendum,  
 “ ubi duntaxat tuto sectio fieri potest. Ad quod probandum  
 “ tuentur se Hippocratis autoritate, lib. 6. Aphorif. Aphor.  
 “ 18. Sed posteriore hoc primùm soluto, ad prioris solutio-  
 “ nem deinde veniemus, rationem, viam, modumque scri-  
 “ bentes quibus id sperari, obtinerique possit, quod volu-  
 “ mus.

*Vesicam parte (si quis per hypothesein id velit)  
 membranea ladi absque pernicie posse.*

“ **S**UNT enim plerique (& in iis Galenus) qui Hippo-  
 “ cratem excusare laborent adversus cystotomos, quod  
 “ censuerit vesicam incisam non sanari : cum tamen ipsi eam  
 “ à calculariis sectoribus tuto dividi passim videant, quod  
 “ nec is ipse ignorare debuit, cum id opus sui temporis hel-  
 “ colithis peritioribus ἀποδόνας obeundum concederet. Ex-  
 “ cipiunt enim Hippocratici, præceptorem de ea parte  
 “ membranea nerveaque (ut inquit alibi Galenus) atque  
 “ spermatica, & ob id consolidari recusante Aphor. 18. lib.  
 “ 6. intellexisse, & non de ea quæ ab istis ad vesicæ cervi-  
 “ cem



“ cem dividitur in lapide detrahendo, quæ carnea, & mus-  
 “ culosa est tota. Idem ait post Hippocratem Aristoteles,  
 “ & Cornel. Celsus lib. 7. cap. 26. [Læsa vesica (inquit)  
 “ nervorum distentiones cum periculo mortis excitat.] Sed  
 “ ut de membranæ tantum intellexisse Hippocratem con-  
 “ cedamus, tamen aphorismus ille universim, & absolute,  
 “ ac semper verus non est. Liceat ergo hic nobis cum bona  
 “ scholæ divinantis venia pacisci, cum divi Hippocratis ve-  
 “ nerandis manibus, iudice etiam Galeno ejus mystagogo.  
 “ Quo enim Aphorismo id denegat vesicæ Hippocrates,  
 “ idem ipse eodem illo subtrahit expressis verbis cerebro, &  
 “ alio libri de locis in homine loco, ejus membranæ.

“ At Galeni testimonio constat, non modo in membra-  
 “ narum cerebri ambarum (quæ haud dubiè membranæ, &  
 “ spermaticæ sunt) corpore, sed etiam in cerebri paren-  
 “ chymatis (unde magna vis spermatis eodem alibi authore  
 “ profluit) concremento, non mediocrem ejus substantiam  
 “ & læsam & ablatam fuisse, cum in Smyrna Ioniæ, sub  
 “ præceptore Pelope, tum alibi, superstites tamen faucia-  
 “ tis. Id Smyrnei adolescentis vulnus ad cerebri ventricu-  
 “ lum alterum usque penetravisse Galenus scribit, cap. 6.  
 “ lib. 8. de usu partium. Quod à Fallopio haud ita pridem,  
 “ & à Valeriola visum scriptumque fuit, & superioribus ad  
 “ Castricæ saris & Rupellæ obsidiones bellis sæpe observa-  
 “ tum, mirantibus id, qui ea vulnera convalescentia tracta-  
 “ bant chirurgis celebribus non paucis, quibus testes adhuc  
 “ adsunt non modo fauciati superstites, sed etiam centurio-  
 “ num, ducum, & principum suos satellites visitantium  
 “ præ.



præcipui. Idem mihi exploratissimum fuit ante viginti  
annos in Jacobo Furnerio apud meos Pithuiricos viatore  
regio sic fauciato & me præsentē, ac præscribente, Com-  
pagneti Turræi manu percurato, facta substantiæ cerebra-  
lis sub altero bregmatis osse instar nucis myristicæ iactura.  
Hoc idem non modo de venis, & arteriis dicturus eram,  
cum vel membranæ, vel membranis corporibus non  
multum absimiles, & pariter spermaticæ videantur, sed  
etiam de tunica peritonæi, quæ Galeno in 7. de anatomi-  
cis administrationibus exactè membranæ est: (ut de peri-  
ostiis, & ossibus ipsis taceam quæ idem in suis Aphorismis  
re-uniri posse negat, utens hoc verbo *ὁ ἐν συμφύεται*) qua-  
rum partium hæc per gastroraphas uterum in ramis cu-  
randis coalescebat, quamvis seminalis sit, ut fieri olim so-  
lere docent Ægineta, & Celsus. Ex illis autem duabus  
arteria nempe & vena juxta cutem phlebotomo sectis, ar-  
teria quidem sæpe licet ægrius (ob motus celeritatem, &  
subtilis sanguinis evibrationem) consolidatur, vena autem  
quamsæpiissime, ne dicam semper re-unitur, idque facillime,  
nempe solo linimenti appressu. Verum in iis omnibus  
mihi responsum iri prævideo, neque illud peritonæi coag-  
mentum fieri ejus sola ratione, sed muscularium carniū,  
vel cutis epigastricæ participatione, neque hanc arteriarum  
& venarum reconciliationem earum peculiari causâ fieri,  
sed cutis superpositæ, & coalescentis societate. Quæ ob-  
jectio friget, cum vena non communem cum cute, sed  
ab ea separatam cicatricem ducat, ut in obesis, aut valde  
carnosis, videre est, venam nimirum sectam, & re-unitam  
procul



“ procul à cute remotam habentibus. Divisas etiam ocu-  
 “ lorum tunicas (maxime ceratoidem) utique spermaticam  
 “ unione cicatricosa sanari notissimum est, licet ejus tensio  
 “ naturalis, & à subjectis humoribus extrusio, coalitui ob-  
 “ stare videatur, quæ tamen tensio coitioni laterum con-  
 “ traria, abest à læsa parte membranea vesicæ, jam liberatæ  
 “ lotio, & calculo : sic, ut ab ea inanitate flaccescens, in  
 “ se mox redeat, sponte utique tunc coalitura more prædic-  
 “ to uteri secti : unde fit ut labra concidentia plagæ ultro ad  
 “ mutuam unionem adducantur. Quid ergo ibidem vul-  
 “ nus sanescere prohibuerit? præsertim cum ea tam mere  
 “ in viventibus non sit membranea, nedum nervea, (ut fe-  
 “ rè omnes & cum iis etiam plerumque Galenus censent)  
 “ quàm tunc nobis esse videtur, cum ex cadaveribus suillis,  
 “ aut bubulis exempta est, & multum, diuque saxo levi al-  
 “ lisa, flatuque distenta, ac resiccata pueris in ludicrum  
 “ comparatur, vel pharmacopolis ad ægrorum fomenta pro-  
 “ utre ficcatur, iisdemque ut olim in Græcia, & nunc in  
 “ Anglia ad enematum decoctiones concipiendas aptatur; sed  
 “ tanto intra animal vivens, aut mortuum crassior, & con-  
 “ fusæ carnis modo quasi compactior latet, quanto ex cor-  
 “ pore avulsa percussa, inflata, ficcata, exilior, & ad perspi-  
 “ cuitatem usque exhausto humore, mucore, lentoreque  
 “ suo naturali tenuior conspicitur. Nec vero eam (ut ne-  
 “ que uterum) profus excarnem (& consequenter inconsol-  
 “ lidabilem) dicere licet, cum ex Galeno (in methodo)  
 “ carniū genus unum non sit. Quædam enim sunt pa-  
 “ renchymaticæ, quædam hac vel illa fibrosa, aut membra-



“ nea congestione variantes, nonnullæ musculosæ, quales  
 “ demum propriissime carnes vocantur. Inde est quod  
 “ idem libro de anatomicis administrationibus septimo, con-  
 “ fidenter pronunciet non unam esse in iis carnum generi-  
 “ bus substantiam, & colorem, cum ea quæ musculosa est,  
 “ mollior, & rubicundior sit carnibus (inquit ille) ventri-  
 “ culi, uteri, vesicæ, intestinorum.

“ Quin vero nec perpetuum est quod idem Hippocrates eod-  
 “ em Aphorismo indefinite pronunciat tenuibus intestinis non  
 “ accidere, ut incisa coalescant. (Nam quod de labro, & præ-  
 “ putio in Aphorismo subsequente legitur notius nunc est id  
 “ aliter se habere, quam ut ab ullo negari possit) Galeni  
 “ autem in eum Hippocratis locum officiosa interpretatio  
 “ contra nos prima specie facere apparens, pro nobis stare  
 “ videtur, contra istos spermaticarum partium in consolida-  
 “ tionis pernegatione propugnatores, dum eam consolidati-  
 “ onem vix, & raro ibi fieri, sed tantum per accidens sic  
 “ fatentur, ut tamen fieri posse nequeant inficiari. Ejus ra-  
 “ tio est, quia illic ubi est vulneratio, medicamenta vel nul-  
 “ lo modo, vel non nisi incommodissime immitti possunt.  
 “ At mihi etiam Galenus non invitus concedet, sæpe sine  
 “ medicamentis ingestis à natura sola partes penitissime ab-  
 “ strusas facilius percurari, quam à medicamentis externas,  
 “ ubi facilis est ab ambiente offensio. (Eo facit exemplum  
 “ modo allatum in capite vulneris uterini collati cum sto-  
 “ machica plaga.) Inde est quod non modo crassa intestina,  
 “ carnosiora sane, & medicamentis per clysteres admitten-  
 “ dis aptiora, sed etiam tenuia (licet hoc ibidem perneget



“ Hippocrates) quamvis membranofiora, & penitus abdita,  
 “ plerunque sanari videamus, quæ fauciata fuisse deprehen-  
 “ dimus nonnunquam ab excrementis duntaxat, & exeun-  
 “ tibus si delitescunt vulnera, plerunque etiam oculo teste,  
 “ si late accepto ictu, vel patefacto orificio introspectentur.  
 “ Iis persanandis ars naturæ subserviens cibum paucum, eu-  
 “ chymum, molliculum, medicamentosum præparat, ne  
 “ multus, aut durus plagæ oras in transitu diducat, cacochy-  
 “ musve male alteret. Sed hæc omnia in vesica melius  
 “ quam in intestino procedent.

“ Primum enim non nisi tenuiora excrementa ad illam  
 “ feruntur, nempe lotia, quæ pauca erunt si parum bibatur,  
 “ ut suis ægris cystotomi imperant. Item non acria, &  
 “ erodentia si modo suavia, & euchyma sumantur, præpur-  
 “ gatusque fuerit æger sectus, ut fieri solet, & maximè si  
 “ sanus eò venerit. Denique sumendorum vim medica-  
 “ mentosam ad vesicæ usque plagam ferri indicat lotiorum  
 “ color, & odor, in iis qui Rheum aut Therebinthinam  
 “ sumunt, ob alios urinalium partium morbos, huic malo  
 “ ut aliis ulceribus utilissimam. Adde quod cathetere per  
 “ proximum colem, medicamentum nulla suarum virium  
 “ parte privatum eo usque tam facilè injici potest, quàm per  
 “ clysteres in crassorum intestinorum recessus; quodque in  
 “ partem vesicæ superius sectam excrementa urinaria delapsu-  
 “ ra non sint, sed in inferiorem, tunc utique incolumen, un-  
 “ de omni momento effundi poterunt sine noxa, pro arbi-  
 “ trio ægrotantis, qui nimirum tunc illæsus erit (ut hic con-  
 “ stituimus) sphincteris musculus voluntati obsecundans.

“ Prætereo



“ Prætereo sciens facilem tubuli in pene retentionem, si  
 “ fortè contingeret urinam male descendere, qua etiam cy-  
 “ stotomi vulgares sæpe uti solent ante vulneris coalitum.  
 “ Hinc fieri videtur, ut in interna vesicæ parte (vitata inte-  
 “ rim regione quæ ureteres excipit) tuto plagam duci posse  
 “ ratio persuadeat, & experientia comprobet.



*Dioristica Aphorismi Hippocratici ex eodem ipso,  
 & Aristotele explicatio.*

“ **S**ED si quis parum, aut iis rationibus, aut productis  
 “ producendisque exemplis credat, Hippocraticæ  
 “ nempe authoritatis clavum (cui uni affixus hæret) nun-  
 “ quam amittens, eum de manibus illi (non invito Hippo-  
 “ crate) extorquebo, subsidiaria Aristotelis ope adjutus.  
 “ Præstat enim ut idem ipse seipsum interpretari audiat.  
 “ [Vulnera (inquit secundo Prorrhetic.) magis lethalia sunt,  
 “ quæ in venas crassas, in collo, & in inguinibus infliguntur,  
 “ deinde quæ in cerebrum & hepar, postea quæ in intesti-  
 “ num, & vesicam. Sunt autem hæc omnia perniciofa val-  
 “ de, non tamen ita ut nemo ex iis evadat. Nam & loci  
 “ qui hæc nomina habent multum inter se differunt, &  
 “ iidem modi: multum etiam differt corporis ipsius structu-  
 “ ra.] Haftenus ille. Quamvis autem posterioribus his ver-  
 “ bis, sibi ab Hippocrate caveri putent ii, qui vesicam inte-  
 “ riore sui parte non nisi perniciose incidi posse contendunt:

“ Tamen



“ Tamen Aristoteles 5. cap. lib. 3. de partibus animalium,  
 “ ubi quod Hippocrates de vulnere vesicæ lethali ἀδιόριστος  
 “ pronunciaverat, ad ejus membraneam partem (ut vulgo  
 “ fit) restrinxisset, videtur tamen mox aut ex ejus mente,  
 “ aut ex sua ipsius experientia ulterius progredi, dum ait ;  
 “ [Vesica incisa non consolidatur, nisi in sui colli initio,  
 “ quamvis sciam accidisse, ut ejus vulnus aliquando occalue-  
 “ rit.] Sed valeant istæ ex fragmentis authorum quæsitæ ob-  
 “ jectiunculæ, & anxie earum ex libris confutationes, quan-  
 “ do secus esse oculari fide docemur. Quam in rem aliquot  
 “ historias proferre placet, ne Monstreleticæ dubiam ad-  
 “ huc fidem facienti, aut Franconicæ quæ unica satis pro-  
 “ bare non potest, nimium leviter acquiescamus.

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*Lasarum sine perniciæ vesicarum in parte mem-  
 branea historia prima.*

“ **P**ARÆUS nulli non cognitus, & doctissimus ille Iatro-  
 “ chirurgus Fr. Rastius hujus historiæ testes mihi lo-  
 “ cupletissimi, utpote oculati fuerunt, quam ego tum ex  
 “ aliis compluribus, tum ex ipsa chirurgi ad medendum ad-  
 “ hibiti tripode, & verbis, & scripto ex ejus diariis fideliter  
 “ desumpto didici, & hic transcripsi, jam olim quidem au-  
 “ ditam ex ipsius vulnerati ore, sed nondum sat mihi (ut  
 “ ingenuè fatear) persuasam. Talibus enim in rebus mihi  
 “ imponi non facile patior.

C c

“ Aurelio



“ Aurelio civi *Cueer de chesne* vocato hospiti floris liliacei  
 “ Anno Domini 1560. die decima Februarii confossus fuit  
 “ infra umbilicum venter pugione satis lato. Ei xix. diebus  
 “ ac noctibus totis vulnere solo, nec prorsus alio meatu  
 “ emanans lotium vesicam haud dubie læsam arguebat:  
 “ quod cum merum exiret, ab ejus parte magis exangui &  
 “ minus carnea jure optimo stillare conjiciebatur. Vulneris  
 “ præterea accepti sedes editior insinuabat necessario id vis-  
 “ cus parte sui summa (qua minus verè carneum esse vide-  
 “ tur) fuisse sauciatum. Florentius Philippus chirurgus so-  
 “ lers, immisso facillime per uretram argenteo siphunculo  
 “ urinam deduxit, vulnusque citissime percuravit.



### *Historia Secunda.*

“ **H**ANC historiam placet hic attexere, quæ sectioni  
 “ vesicali supra ejus collum factæ favens, eadem  
 “ opera pro calculi vesicalis extractione hypogastrica facit.  
 “ Catharina Biard vidua Mathurini Serre domini hospitii  
 “ dicti *les verds gallands*, in Blefiæ suburbio dicto *Bourg-*  
 “ *neuf*, sexaginta sex annorum per xx. annos tam ægrè, &  
 “ duriter cacaturiebat, ut sæpe toto mense adstricta, nec  
 “ sumptis ore catharticeis quicquam proficiens, solo enema-  
 “ tum usu demissis stercoribus verissimos calculos, instar  
 “ avellanæ, aut juglandis podice egereret. Accidit tandem  
 “ ut vasto, & duriore quam per asciten aut tympaniten tu-  
 “ more in speciem prope scirrhuso turgescens, mirata sit per  
 “ pudenda



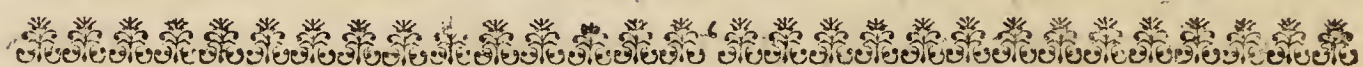
“ pudenda massam indigestam sibi devolvi; cui malo pro  
 “ matrice præcipitata accepto, ea fieri quæ ad uteros prolap-  
 “ sos faciunt cum medicus jussisset, nec hilum ea profecif-  
 “ sent, convocatis secum chirurgis Carlomagno & Jacobo  
 “ Bellaiis communi sententia agnoverunt eam massam spif-  
 “ sam, rubentem, carniformem, duobus pugnis majorem,  
 “ inæqualiter duram, dumque tractaretur collisionis sonum  
 “ auribus referentem, esse vesicæ calculis oppletæ corpus in-  
 “ ternum, pondere calculorum eo depressum, laxatis scilicet  
 “ ab eo fasce membranis, quibus ossi pectinis adnectitur,  
 “ adducta secum colli uterini parte non exigua. Sic igitur  
 “ cum affecta parte cognito etiam affectu, ducta satis lata  
 “ incisione in ipso vesicæ pendentis corpore, undecim cal-  
 “ culi inde exempti sunt, triangulares omnes, quorum non-  
 “ nulli parvas pilas palmarias, quidam castaneas magnas, &  
 “ mediocres æquabant, cum numerosis arenis, quos omnes  
 “ vidi, & tractavi. Sic igitur repulsa cum utero vesica, quo  
 “ mense toto decubuit, sede sua constitit. Surgenti autem  
 “ relapsa est: nempe laxari jumdudum consuetis ejus appen-  
 “ diculis, & solito stercoreum durissimorum pondere pessum  
 “ euntibus. Atqui vel sic habita non segniter tamen nego-  
 “ tia domestica, hospitalaris per quinquennium postea, ver-  
 “ fabat, subligaculo ad id idoneo utens.

*Observanda*



*Observanda ad hanc historiam secundam duo notabilia.*

“ **H**IC vides (lector) diu ante casum vesicæ ex ejusdem  
 “ corpore pertuso calculos solitos fuisse transpene-  
 “ trare in intestinum princeps, qui unà cum scibalis deicie-  
 “ bantur. Post lapsum vero, idem corpus internum sec-  
 “ tum fuisse antrorsum, sic ut undecim calculi quos diu trac-  
 “ tavi eo orificio exempti fuerint. Jam mihi hoc considera.  
 “ Id si patitur vesica etiam parte sui interna vel foras usque  
 “ propendente, quid non sperabit eadem sana à bene admi-  
 “ nistrata sectione vesicali hypogastrica, vel uterus ipse ab  
 “ incisione Cæsarea?



*Tertium ægædeyµα ex undecima historia de calcu-  
 culis humanis Joannis Centmani medici Ger-  
 mani.*

“ **A**NNO Dom. 1558. Conradus à Bernheim in expedi-  
 “ tione Philippi Hispaniarum regis contra Henri-  
 “ cum 2. Regem Gallorum eques conscriptus, á commili-  
 “ tone fauciatus fuit sphærula tormentaria, quæ ex lamina  
 “ chalybea byrsam pulvere bombardico, & globulis plum-  
 “ beis plenam tegente versus abdomen resiliens, palmi infra  
 “ umbilicum spatio, intra corpus penetrans, & vesicam  
 “ vulnerans



“ vulnerans in eadem restitit (impetu videlicet ejus jam frac-  
 “ to in primo ad eam laminam byrsæ ferream afflictu ) In  
 “ imo ventre non longè à pectine sauciatum fuisse oportuit,  
 “ etiam si fortè progaster fuisset. Inde Lipsiam ad chirur-  
 “ gos pene exanimis perlatus, ab eisque ob deprehensam in-  
 “ ter percunctandum obligandumque insigniter læsæ vesicæ  
 “ plagam (ex Hippo. lib. 6. Aphoris. 18. prognosi) deplo-  
 “ ratus, Torgam domum suam advehi voluit, ubi ab eodem  
 “ summæ eruditionis medico Centmano Leonardum Wol-  
 “ ciam chirurgum adhibente curari cœptus est, qui laxatis  
 “ plagæ vinculis periculum ut priores agnoscens, ei tanquam  
 “ deplorato suam operam denegabat. Victus tamen ægri ac  
 “ medici misericordis precibus studiosè vulnus religat :  
 “ (quod opinor sutura quæ dicitur sicca fieri debuit) substan-  
 “ tiæ autem cutaneæ, & carneæ ab ictu proximè inflicto (ut  
 “ illis mos est) ustulatæ, & contusæ, ac proinde suppuratæ  
 “ glutinosa quædam materies cum urinis illac stillantibus  
 “ permixta, circumcirca in vulnere adhæserat : quod fieri  
 “ debuit non tantum arenulas faciente materia pituitosa, &  
 “ arenulis ipsis ibi hærentibus, sed etiam pure, atque adeo  
 “ substantia quadam læsæ vesicæ cum urina per vulnus emis-  
 “ sa illic retentis, & carni renascenti concrepcentibus. Quin-  
 “ que enim jam ab eo ictu septimanis putredine sublata, &  
 “ amplitudine vulneris decresciente calculus instrumento chi-  
 “ rurgico ex vulnere detractus est, quem tophaceum, &  
 “ transversæ digiti crassitie latum circumvestiebat ambustæ  
 “ cujusdam quasi cutis species, duarum stipularum spissitu-  
 “ dinem habens. Hoc detracto, facta vulneris ampliati-



“ one, & repurgata à sordibus, arenulis, viscositate, sanie,  
 “ & aliis quæ cum globo plumbeo ab acrimonia lotii con-  
 “ sumpto ingressa supererant, quæque naturale vesicæ orifi-  
 “ cium diu obstruxerant, vulnus per quod duodécim septi-  
 “ manis (quod hic attente notari velim) urina defluxerat,  
 “ tandem persanatum est, idque tam breviter pro natura &  
 “ tempore vulneris, & partium fauciatarum, tamque per-  
 “ fecte, ut ambulanti, equitanti, vecto, nihil obstaret; duc-  
 “ taque paulo post uxore prospere semper degere persliterit.



*Aliud observandum in sectorum vulgari modo ca-*  
*daveribus historiæ vim habens.*

“ **H**UC referendum est, quod semel à me observatum  
 “ memini, & à doctis aliquot (quorum unus ex  
 “ professo insignis hac in urbe erat cystotomus) ea de re à  
 “ me interrogatis fando accepi, asserentibus uno ore omni-  
 “ bus se dissecuisse aliquot non modo jam adolescentum in  
 “ infantia ante sectorum, sed etiam provectorum in adoles-  
 “ centia cystotomiam expertorum cadavera, in quibus cica-  
 “ tricis in vesica jam olim secta obductæ vestigium longè ad  
 “ membraneam usque vesicæ interioris partem porrigi con-  
 “ spicue videbatur. Neque id mirum. Quî enim è tantulis  
 “ vesicularum corpusculis tantos lapides educi posse credibi-  
 “ le est, quantos ibi congeri potuisse obstupescimus, sine  
 “ sectione aut dilaniatu partis non mediocris vesiculæ inte-  
 “ rioris?



“ rioris ? cujus singulare collum non fit verisimile tanto ori-  
 “ ficio patere posse, quanto ad transmittendum ingentem  
 “ calculum necessario opus esse videtur, quin bona pars  
 “ membranei ejus corporis simul ante confecta fuerit.



*Alia ratio pro indemni hypogastricæ cystotomias  
 opere, contra membranose vesicarum partis  
 meticulosos sectores, dato illis non debere lædi.  
 & exauctario probato membraneum vesicæ cor-  
 pus in eo non sauciari.*

“ **J** A M vero mea me in istos panoplia exarmans ipsissimis  
 “ eorum telis instructus in arenam descendo, eis pro-  
 “ dige indulgens, quod modo pernegabam. Nempe vesi-  
 “ cam sola sui carnea parte, & duntaxat juxta ejus colli  
 “ principium tuto secari posse. Qua in re si id fieri in hac  
 “ sectione hypogastrica dixero, opus novum mihi ab istis  
 “ nunciatum iri animo cerno: sed de litis victoria securus  
 “ esse mihi videor.

“ Duo igitur hic nova, sed verissima propono. Prius  
 “ est sectionem hypogastricam (ubi vesica eo quo docebi-  
 “ mus modo supra os pectinis surrecta erit) non fieri in par-  
 “ te ejus valde interna, & membraneam ad ejus scilicet fun-  
 “ dum; sed in tam ferè vicina ejus collo parte (supernè  
 “ tamen & antrosum pubem versus spectante) quam fieri  
 “ jamdudum ab istis solet, per perinaeum infernè, retro-



“ sum, & intestina versus, idque intacto à nobis peritonæi,  
 “ (quod hæctenus nulli innotuerat) corpore præcipuo, quod  
 “ ipsum tamen in eorum per perinæum utraque sectione vul-  
 “ neratur. Nec enim aliter fieri potest, quin pars ejus peri-  
 “ tonæi eousque delati secetur, lacereturque ab illis, si adi-  
 “ gatur profunde sectio: quæ rursus si minus alte penetrat,  
 “ tunc sphincteri vesicali fit vis, eaque tanta, ut licet ulcus  
 “ in aliquibus coeat, tamen inducta in multis magna, dura-  
 “ que cicatrix, sphincterem arctè claudi prohibet, perpetu-  
 “ um lotii per penem stillicidium inducens. Si autem vul-  
 “ nus curari nequeat, & cicatrice bene jungi, tunc urina per  
 “ id guttatim in brachias defluet, cujus molestiæ periculo  
 “ nostra cystotomia caret. Posterius est, quod is locus  
 “ (quem in vesica distentissima ad ejus distentionis à nobis  
 “ artificiosè procuratæ distentissimum usque tumorem se-  
 “ camus, quique inter peritonæi vesicæ subjecti præcipuum  
 “ corpus, & os pectinis intermedius est, bonaque sui parte  
 “ venientem ex osse pubis ad vesicam membranam habet, ac  
 “ ibi dilatatur) tam propinquus est vesicali collo (sed parte  
 “ sui supera) quam alius ille inferior ad perinæum, ut ocu-  
 “ lo, digitoque persæpe notavimus, nunquam aliter se ha-  
 “ bere experti: quæ causa, ambo loca eatenus æque conso-  
 “ lidabilia facit (utraque enim pariter carnea sunt) sed hy-  
 “ pogastrius eo facilius solidescit, quo minus eò ruunt lotia,  
 “ lotiorumque sordes, & pus ex ulcere manans. Sed iis  
 “ sordibus in nostra sectione intactus vesicæ sphincter per  
 “ colem exitum liberum pro ægri arbitrio patefacit, quibus  
 “ molestiis carere non potest perinæi sectio: ad quas insu-  
 “ per



“ per in vulgaribus sectionibus alia ex aliis nascentia pericu-  
 “ la accedunt, ex vicinis partibus. Nempe ob viciniam  
 “ recti intestini, duriscrementis ibi retineri solitis sæpe  
 “ gravati, aut ab iisdem perliquidis fatigati, vel putribus pu-  
 “ trescentis, condylomatisque duris & tumentibus obsessi,  
 “ vel hæmorrhoidibus cum vel sine ulcere intus, aut foris,  
 “ vel utrobique non raro occupati, ut de prostaticis virilibus  
 “ aut uteri foeminei ad innumeros morbos levi occasione  
 “ obnoxii collo taceam, quarum partium lædendarum meta  
 “ sectio nostra vacat.

*Nota.*

“ Eædem rationes huic nostræ sectioni non tantum in cal-  
 “ culo, sed etiam in absolutæ, & alioqui lethalis ischuriæ  
 “ curatione favent, sive ea sit à calculo, sive à pituita, aut  
 “ renali pure, sive à sphincteris aut penistumefactorum in-  
 “ flammatione, aut obstructione intra uretram hyperfarco-  
 “ tica, modo ut tempestive, solerter, & viribus integris ad-  
 “ hibeatur.



*Qua ratione ad hypogastricam cystotomiam tuto,  
 & quamminimum fieri potest dolorificè obeun-  
 dam chirurgus se exercere, sine calumnia me-  
 tu, & subjecti ad hoc serio adhibendi periculo  
 possit, & debeat.*

“ CUM omnium hominum, sed præcipuè popularium  
 “ amicorumque, societatem juvare sit humanum,  
 “ eorundem verò etiam exterorum & inimicorum amicitia-  
 “ am, utilitatemque procurare Christianum, humani Chri-  
 “ anique hominis, sed maximè medici partes erunt, om-  
 “ nium sanitatem (quæ ut vitæ condimentum atque adeo  
 “ vita est, ita & medicæ artis scopus habetur) sic conserva-  
 “ re, ut contra eam quocumque in homine aliquid male  
 “ moliri, quovis scelere sit sceleratius. Unde fit, ut ex  
 “ medicis ii demum homicidii nomine infames haberi de-  
 “ beant, qui ullius etiam publici boni prætextu in privato-  
 “ rum viles (ut loquuntur) animas quasi ludendo dubia ex-  
 “ perimenta prodigunt. Cujus naturæ cum videatur esse  
 “ hujus novi inventi chirurgema, indigeatque necessariò ex-  
 “ perimentis compluribus ante comprobari, quàm publi-  
 “ cum in usum admittatur; censui decere, ut quod ab huma-  
 “ nis humanæ anatomes professoribus, priscam hominum vi-  
 “ vorum dissectionem detestantibus, fieri solet in hominum  
 “ cadaveribus, plerumque etiam in viventium quadrupedum  
 “ corporibus, idem & nos sequamur in earum partium per-  
 “ quirenda



“ quirenda natura, situ, & vicinia, inque observandis qui  
 “ adiri, aut vitari debent locis, quos vulnerari est necesse in  
 “ hypogastrica hac cystotome. Compendiosius esset fortasse,  
 “ corpora viva secare: sed humana ut dispendiosum illis,  
 “ sic sectoribus inhumanum. Bruta autem licitum quidem,  
 “ sed in hac re ad nostram disciplinam parum conveniens, &  
 “ ad operandi sumendum exemplum difficile, ne dicam  
 “ haud sperandum. Neque enim in iis pari positura sedet,  
 “ ut in hominibus vesica: (quod à Vesalio est observatum)  
 “ cum in nobis naturæ providentia arctius ad os pubis (sub  
 “ quo ea latet) in quadrupedibus verò laxius hæreat: idque  
 “ meo iudicio, propterea quod in nobis stantibus & erectis  
 “ sic aptata stabiliri firmitus ad os illud debuit, ne propende-  
 “ at. In quadrupedibus verò repandis non potest ei ossi  
 “ non incumbere, & ab eo quasi sustineri, quod illis com-  
 “ modo est. Propterea in eis imus hypogastrii locus  
 “ (quem secare hic oportet) cum ibi eorum pene ad umbi-  
 “ licum tendente in maribus occupetur, sectioni vesicali o-  
 “ portunus esse non potest ut in nobis, quorum penis hypo-  
 “ gastrio non affigitur, neque pubem tegit, juxta quam fit  
 “ sectio. Fortasse tamen hoc in quadrupedum foemellis  
 “ tentari posset, si per earum uretram vesica impleri pos-  
 “ set, & eam implens humor in illis retineri quousque sectio  
 “ facta foret in hypogastrio. Ergo ad humana *ἀνθρώπινα*  
 “ veniendum, sed mortua primum. Deinde ad quædam  
 “ viventia sine culpa & crimine transeundum: ea nempe  
 “ (meo iudicio) quæ ex sectione hac tentativa detrimen-  
 “ tum nullum timere, emolumentum autem vel sanitatis  
 “ recuperandæ,



“ recuperandæ, vel vitæ à furcis redimendæ sperare possunt.  
 “ Sunt autem ad certissimam hujus operationis tentativæ dis-  
 “ ciplinam utraque necessaria. Quædam enim à mortuis  
 “ solis commode cognosci possunt; quædam non nisi à vi-  
 “ vorum sectione perdiscuntur. In mortuis enim, quorum  
 “ partes ventris continentes ante vesicæ sectionem sustuleris,  
 “ conspicue & nullo damno apparebit, quomodo vesica hu-  
 “ more injecto paulatim tumescat, & supra os pubis emineat :  
 “ Itemque post sectionem, quæ interior & exterior partes  
 “ bene vel male sectæ fuerint; ut iis nullo detrimento  
 “ tentatis, & velut præludendo cognitis, seriæ in vivis secti-  
 “ ones per eadem vel meliora vestigia tutius & confiden-  
 “ tius postea suscipiantur. Hæc enim quæ præsciri oportet  
 “ in mortuis præsecandis nemo in vivis scrutari, & discere  
 “ potest, iis manentibus incolumibus. Sed an vita ob no-  
 “ stram hanc sectionem periclitetur ex solo successu sectio-  
 “ nis vivorum apparere potest. At ne longius abeas, en tibi  
 “ nostra aliquot experiendi exempla in mortuis jam ob-  
 “ servata, præsentibus hujus urbis chirurgis aliquot experien-  
 “ tibus, & bene doctis.

“ Nunc nuper accitis ex illorum numero tribus non pos-  
 “ tremi nominis, calculoso cuidam Brittoni dysenteria mor-  
 “ tuo syringe per pudendum vesicam aqua opplevimus tepi-  
 “ da. Imi ventris cutem, adipem, & intermediam duo-  
 “ rum muscutorum succenturialium regionem, adacta inde  
 “ deorsum, caute, versus intimum os pubis, novacula divi-  
 “ dentes, postea vesicam trium digitorum latitudine vulne-  
 “ ravimus; immissoque in anum digito, calculum instar

“ ovi



“ ovi gallinacei magnum, per vulnus, foras, altera manu in-  
 “ tromissa in penem auxiliante, facile expulimus; inventis in  
 “ eodem cadavere mox aperto non modo intestinis cum pe-  
 “ ritonæo integro illæsis, sed etiam intacto eo vesicæ mem-  
 “ branosæ, & penitioris latere interno, quod intestina parte  
 “ postica contegit.

“ Hoc idem similiter in duobus mare & fœmina à suspen-  
 “ dio adhuc recentibus, sed non calculosis, cum iisdem ip-  
 “ sis exploravi, peritonæo illo præcipuo etiam intacto: quam-  
 “ vis per plagam immissemus nucem juglandem in vesti-  
 “ cam, & ex ea illam exemissemus per eandem, adjuvante  
 “ digito in anum immisso in viro, & intra collum uteri in  
 “ muliere.

“ Et iterum in podagrici cujusdam cadavere cum alio chi-  
 “ rurgo anatomes longe peritissimo, idque valde admirante.

“ Iterumque in cujusdam hydropici, ab hæmorrhagia tan-  
 “ dem mortui cadavere, cui difficulter admodum per pe-  
 “ nem pauculum aquæ vix infuderamus, quæ perparce (ut  
 “ pauca erat) exiit, vesica tamen late vulnerata, & loco hy-  
 “ pogastrii prædicto hiant, abunde profecto exitura à tota  
 “ ventris hydropici cavitate, si peritonæum illa parte tantil-  
 “ lum læsum fuisset, quod proinde contigit prælarge fieri,  
 “ mox ut venter imus explorandus alibi punctim vulnerato  
 “ peritonæo modice confossus fuit.

“ Eorum nullis peritonæum læsum deprehendimus: Sed  
 “ vesicam in tumorem ab infusa aqua attolli nondum oculo  
 “ teste conspexeram. Id autem in quodam postea conspi-  
 “ catus sum, cui Dom. Pinæus chirurgus peritissimus, & pro-



“ fessione cum Dom. Colloto leviro suo cystotomus, ana-  
 “ tomen ventris suis discipulis exponens, musculos gasteri-  
 “ cos, cum parte peritonæi superiore duntaxat sustulerat,  
 “ inferiore tamen meo rogatu manente adhuc integra.

“ Vesicæ enim (HIC AURES ARRIGE LECTOR) orbicu-  
 “ lariter distentæ fundum illud superius á sui medio superi-  
 “ ore (unde urachus incipit, & quò descendunt arteriæ um-  
 “ bilicales) habet inde, versus intestina, retrorsum versus  
 “ usque ad musculum ejus sphincterem & subjectum peri-  
 “ næum, corpus præcipuum peritonæi sibi valide adnexum,  
 “ quod ne attingimus quidem. [Eæ autem arteriæ (quate-  
 “ nus arteriæ) in jam natis nobis otiosæ sunt, sed tamen  
 “ adhuc valde utiles quatenus in membraneam quandam  
 “ duritiem cum uracho degenerant peritonæi firmitatem  
 “ ima illa parte adjuvantes.] Altera autem dimidia ejusdem  
 “ vesicæ pars antrorsum ab eodem urachi initio versus pu-  
 “ bem (quicum nobis futura res est) vestitur superne mem-  
 “ brana veniente ab osse pubis, cui per eam adnectitur, non  
 “ autem ut putant per præcipuum illud peritonæi corpus,  
 “ sic ut ea parte vesica videatur esse, & sit extra peritonæum,  
 “ & constituere quartum quendam exiguum ventrem.  
 “ Quod si quis pervicacior eam membranam peritonæi esse  
 “ portionem contendat (licet præter ocularem ejus partis  
 “ sensum superius illud memoratæ hydropici cadaveris inci-  
 “ suræ nihil aquæ effudentis paradigma illum erroris mani-  
 “ festi coarguat) sit volo peritonæi quædam productio, sed  
 “ exigua, & forte talis qualem illud ossibus quibusdam, at-  
 “ que adeo hepatis, lienis, renibus, intestinis, obiter distri-  
 “ buit :



“ bult; sed magis extensilis, membranæque ossi pubis pe-  
 “ ritoſticæ confuſa: inter quas anticas, & poſticas veſicæ  
 “ partes cum ea repletiffima eſt, tunc quatuor aut quinque,  
 “ & amplius digitorum ſpatio à ſeipſis poſtica & antica veſi-  
 “ cæ latera diſtant; ſic ut ob id non periclitetur inteſtinum,  
 “ ſed neque peritonæum ipſum lædi à novaculæ anteriorem  
 “ veſicæ partem ſpectantis cuſpide, ſed neque veſicæ ipſius  
 “ poſterior facies inteſtiniſ contigua, & peritonæo inferne  
 “ veſtita. Hæc in cadaveribus ſolis perdiſci poſſunt, & de-  
 “ bent, cum ſcitu perneceſſaria ſint.

“ Verum, ſitne ea etiam ipſa quam designamus pars in-  
 “ terna & externa lethalis necne, nondum ſatis teſtatum ar-  
 “ bitror, ſed id in vivis duntaxat experiri licet: Hoc ſine  
 “ calumnia & crimine, in alterutris duorum noſcere poterimus:  
 “ mendicis nempe calculoſis vitam morte miſeriores  
 “ præ dolore viventibus, & cum hac ope egeant à nullo  
 “ operatore præ inopia adjutis: (In iis enim hoc per hypo-  
 “ theſin anceps remedium experiri, quàm nullum præſtat.)  
 “ Aut in iis, qui ob crimen morti adjudicati ſunt; impe-  
 “ trata illis à principibus vitæ gratia. Regum enim eſt (ut  
 “ ait Gal. I. cap. lib. 3. de facult. ſimpl. med.) ea experimen-  
 “ ta ſuo meri imperii jure elargiri. Ii ſi calculoſi erunt, me-  
 “ lius cum cyſtotomo omni ex parte opus in eis omne abſo-  
 “ luturo, nec ſolam tentativam (ut vocant) aggrediente  
 “ agetur; ſin minus, etiam tunc perdiſci poterit lethalis ſit  
 “ necne ſectio.

“ Modus autem talia experimenta tutò agendi nobis hic  
 “ proponetur triplex.



“ Sed in unoquoque horum vesicam impleri volo. Est  
 “ enim necessaria quædam operationis hujus tutæ regula. At  
 “ ejus implendæ modus triplex, & instrumenta quibus im-  
 “ pletur varia. In duobus enim primis arte per consimilem  
 “ syringem impletur, sed non prorsus similibus catheteribus  
 “ aptandam, ut dicetur suo loco. In tertia vero id à natu-  
 “ ra expectabitur; si arte per alterutrum duorum modorum  
 “ fieri non possit, cui ars quoque auxilium ad id afferet.

“ Quod ad primum ergo attinet, Æger jacere meo qui-  
 “ dem judicio supinus debet. Sic enim à sectionis futuræ  
 “ anteriore loco deorsum tunc retrocedent intestina, & à  
 “ vesicæ collo ad fundum tunc declive, urina, vel injectio,  
 “ & calculus (si quis inerit) confluent, intestinaque à se  
 “ compressa procul à loco incidendo utiliter removebunt.  
 “ Hoc apparet in herniosis, quorum stantium ramex intesti-  
 “ nalis antrorsum protuberat, sed intestina inde recedunt  
 “ eo tumore ultro detumescente mox ut in dorsum recum-  
 “ bunt; & in ischuricis à calculo vesicæ sphincterem obtu-  
 “ rante, quo inde remoto sanatio. Nam ut inquit, in Co-  
 “ acis Hippocrates [Calculosi, si ita figurentur, ut lapis ad uri-  
 “ narium meatum non delabatur, facile mejunt.] Idcirco  
 “ Gal. primo de locis affect. vult eos sic componi, ut lapis  
 “ succusso corpore emotus ex eo loco (tunc eminentiore)  
 “ versus fundum (tunc declive) sua gravitate descendat,  
 “ detque lotio mox exituro viam, coadjuvante manus ad ve-  
 “ sicam compressione. Ne tamen hic lotium effluat caven-  
 “ dum est, quod penis compressionem fiet. Sic super lectum,  
 “ mensam, aut scamnum, jacenti, & brachia, crura ac  
 “ tibias



“ tibias (ut vulgo solet) fasciis vincta habenti, vesica hordei  
 “ aqua, aut lacte, aut vulnerario decocto per argenteum si-  
 “ phonem pyxidi clystericæ aptatum & peni immissum, in  
 “ eam usque penitus injecto, quam fieri amplissime potest  
 “ distendi debet : (quod per imi ventris meteorismum cog-  
 “ noscetur :) utque ea non refluant, penis vel manu servi  
 “ stringi, vel molliculo fasciæ xylinæ, aut canabacæ stuppæ  
 “ nexu comprimi tamdiu debet, dum immissus humor foras  
 “ per vulnus mox infligendum aliquanto post modice exili-  
 “ re cœperit. Hoc in viris. Sed injectum mulieribus hu-  
 “ morem sistere eo duntaxat modo licebit, quo indita ene-  
 “ mata sistere solemus, stuppeos floccos podici apprimendo.  
 “ Quod si per siphonem humori in vesicam ingressus neutris  
 “ pateat, tunc foemina in dorsum jacente, & urinam conti-  
 “ nere iussâ ; sed viro resupinato, & colem vinculo molli  
 “ constrictum habente ; differenda tamdiu sectio erit, dum  
 “ lotio stillatim è renibus fluente, vesica intumuisse videatur,  
 “ ut in ischuria solet. Sed hoc ad tertium modum  
 “ pertinet implendæ vesicæ. Succedit ergo ut de locis inci-  
 “ dendis, & incidentibus instrumentis agamus. Locus du-  
 “ plex est, exterior, & interior. Ille cutem, & subjectum  
 “ adipem in propinqua ossis pubis parte continet. Hic in  
 “ regione eadem medius subest inter duos musculos rectos,  
 “ ima eorum parte, aut potius breves illos eis subsidiarios,  
 “ sub quibus latet membrana ab osse pubis procedens, &  
 “ cum peritonæi fortasse (ut hoc licet invitus donem) per-  
 “ tenui portiuncula, simul confusa, inde ad vesicæ cui adhæ-  
 “ ret fundum adiens, ubi scilicet urachus explantatur (ut



dictum est) se cum vesicæ parte antica tunc dum impletur  
 ample dilatans. Rectorum porro musculorum fines (sic  
 Galeno crediti, Vesalio autem melius principia) ibi ab in-  
 vicem parum discedentes, in unum ad mediam pubem sæpe  
 non coeunt, sed ad suum quisque ejus ossis latus deflec-  
 tunt ; sic ut eatenus ibi sectio tutius fiat. Super eos est ad-  
 eps, & super adipem cutis, quæ novacula incidi debet á  
 pectine sursum versus incisione longa trium quatuorve di-  
 gitorum ; deinde adeps qui insensilis est ; ac postea regio  
 illa inter succenturiales musculos intermedia ; idque caute.  
 Posterior autem (qui internus locus est) secandus adhuc  
 artificiosius est, adacta quamproxime os illud pubis cuspide  
 novaculæ falcatae cujus postea figuram damus, idque non  
 recto impulsu (quod vocant Gallice *de droict estoc*) aut  
 sursum, sed aliquantulum deorsum, nempe versus vesicæ  
 collum illud superius, quod inde non longe abest, intacto  
 tamen eo collo atque adeo osse ; idque foramine valde an-  
 gusto, (ne injectio largiter effluat) sed tamen satis patente  
 ut alia novacula lenticularis intromitti possit, quæ falcata  
 est, non acuminata ut prior, sed in cuspide lenticulata, &  
 hebes, apprime tamen in acie sua incidens, quæ in eam pla-  
 gulam mox solertissime immitti debebit, incisionem fieri  
 coeptam mox absolutura. Inde acies ejus media sursum  
 versus ducta dividet, providendo ne quid intrò impellen-  
 do convulneretur. Quocirca hic tres novaculæ in promp-  
 tu haberi debebunt: Una qualis est barbas tondentium,  
 quæ cuti & adipi secandis conveniet: Altera curva, &  
 non dichotomos (id est utrobique secans) verum parte  
 sui



“ sui gibba in dorso hebes, qua parte sursum spectabit, sed  
 “ in ima parte secans, dividendæ scilicet illi mediæ mem-  
 “ branæ vesicali & vesicæ (ut diximus) sic bene conveniens,  
 “ sed quæ alte adigi non debet, locum duntaxat præparatura  
 “ tertiæ incisionem incoeptam perfecturæ. Hæc tertia etiam  
 “ falcata erit, sed non acuta, ne pungat vesicam interius  
 “ aut offendat aliquod intestinum, sed ad cuspidem lenticu-  
 “ lata, quales sunt cultri mulierum, quæ in emundandis o-  
 “ masis intestina findunt; aut saltem ibidem esto latiuscu-  
 “ la, sed hebes, & obtusa, in acie tamen exquisitè incidens.  
 “ Tunc à pube sursum versus incisio duorum, aut trium  
 “ (plus minus) digitorum longitudinem habens ducetur:  
 “ & vacuari permissio liquore, tunc digito alterutrius ma-  
 “ nus in anum viris, aut in uteri collum fœminis immisso,  
 “ calculus ei occurrens ad vulneris os submovebitur; & al-  
 “ terius manus digitis duobus excipietur, aut accommodato  
 “ ad id forcipe præhendetur, eximeturque. Ubi si alii la-  
 “ pilli vel arenæ esse deprehendentur, cochleari ad id com-  
 “ parato excipientur, aut vulsella si grandiusculi sint, sive  
 “ recurvo forcipe detrahentur, idque perfacile: Omnes  
 “ enim ibi convulneratæ partes dilatari quammaxime pos-  
 “ sunt, certe vero multo facilius, & amplius, quàm perinæi  
 “ regio ab aliis secari solita; sic ut ab earum diffractione in  
 “ eruendo calculo timendum non sit, ad quod opus habent  
 “ dilatatorio illo suo mirum in modum exhorrendo. Iis  
 “ peractis penis solvetur, & in eum si opus est argenteus si-  
 “ phunculus mittetur, ibique si placet finetur (ut fit ab aliis  
 “ sectoribus) nempe ut lotio, & ulceris (quo calculosi vix  
 “ carent)



“ carent) puri, ac plagæ recentis cruori sanieique (quæ duo  
 “ vix multa hic esse possunt) via per eum pateat. In iis  
 “ autem omnia esse videntur. Neque enim valde gastrora-  
 “ phe opus esse videbitur, si cruribus ut fit paulum ad se ad-  
 “ ductis colligatisque, supinus æger immotus conquiescat.  
 “ Labra enim ulcerum sat sibi mutuò adhærebunt. Quod  
 “ si forte ibi tunc ramex (quod non metuitur) restaret,  
 “ perizoma ei malo satisfaceret. Interim utendum erit  
 “ victu tenui, & siccante: item clysteribus magis frequen-  
 “ tibus, quam amplis, sed ad plagas medicandas facienti-  
 “ bus. Hactenus de primo modo. Secundus, hic esto ab  
 “ eo primo (quod ad incisoria instrumenta pertinet) non  
 “ diversus, sed aliud genus catheteris habens, qui unus &  
 “ idem utilis erit implendæ vesicæ (quia ut superior fistulo-  
 “ sus est, attamen recurvus qua parte in vesicam recipitur)  
 “ & eidem sustinendæ (quatenus validus) ut scilicet excipi-  
 “ at ictum novaculæ vesicam incidentis in hypogastrio, sicut  
 “ in Marianistarum operationibus eandem excipit in peri-  
 “ næo; debetque talis esse, quali & ipsi utuntur, hoc excep-  
 “ to, quod cavus & fistulosus est, cum illorum catheter sit  
 “ solidus. Sed ne cavitas in nostro hoc illi suam firmitatem  
 “ auferat, mox ut aqua aut decoctum injectum est, in eum  
 “ imittitur virga argentea illum roborans, & injectionem  
 “ exire prohibitura: quem catheterem, ut etiam fistulam,  
 “ non ex solo argento (utpote mollioris materiæ) sed ex eo  
 “ fieri debet, cui artifex tertiam (aut circiter) partem cupri  
 “ miscuerit. Sic enim validior futurus est (cum conversus  
 “ fuerit versus imam partem ventris incidendi) ad vesicam  
 “ sustinendam



“ sustinendam in operatione. Fistulosa autem ea sinuositas,  
 “ in quam mox ab injectione mittitur virga, non potest per-  
 “ tinere ultra principium curvaturæ vesicæ ingredientis,  
 “ ubi est foramen, quo exit in vesicam missa injectio: Sed in  
 “ reliqua parte catheteris, ubi scilicet recurvus est, dorsum  
 “ illius curvaturæ habet alveum exculptum extrinsecus, ut  
 “ excipiat novaculam, neamque (ne quoquam evariet) diri-  
 “ gat, ubi prius sublatione sua indicaverit locum incisionis  
 “ futuræ in hypogastrio, ut solent Marianistæ in perinæo  
 “ supra id dorsum suam incisionem ducentes. Huic autem  
 “ sic aptatur syrinx decocto supradicto plena, ut superius  
 “ dictum est debere fieri in modo priore. Quod decoctum,  
 “ ne mox exeat virga supradicta, statim intrudi debet, ha-  
 “ bens in sui posteriore parte stuppas circumvolutas impedi-  
 “ turas exitum injecti decocti.  
 “ Tertius modus erit, ut si vesicæ repletio nimium tædi-  
 “ osa, laboriosa, aut desperanda fuerit, ne alterutro aut  
 “ utroque modo superiore usurpetur, tertius hic modus lo-  
 “ cum habeat.  
 “ Sinatur vesica per seipsam impleri: (nam id est semper  
 “ necesse) idque fiet non meiando, sed retinendo lotium  
 “ per biduum, aut quousque vesica sic appareat oculo &  
 “ manui extrinsecus tumere, ut sit in ischuria; ad quod  
 “ necesse erit mollicule penem ligare, & supino recubitu  
 “ desidere, atque uti potibus diureticis, non tamen acribus,  
 “ sed maxime aquis vel Spadensibus Leodiensium, vel Po-  
 “ guensibus Nivernensium, aut vino albo cum decocto ra-  
 “ dicum diureticarum, & seminis lithospermi contusi. Illæ



“ autem aquæ præter id quod urinas ad vesicam ducent,  
 “ vindicabunt partes secandas ab inflammatione. Quam  
 “ in rem is qui hanc cystotomiam ex professo exercere  
 “ volet, eas aquas accurate in vitreis lagenis fideliter obtu-  
 “ ratis asservatas semper in promptu habere studebit. Hac-  
 “ tenus de his. Cæterum ea demum quæ in cadaveribus  
 “ expertus sum, & qua potui sedulitate in vivis tuto facien-  
 “ da meditatus, bona fide lectori proponere volui, opera-  
 “ tionum talium in vivis observandarum exempla daturus,  
 “ si quis Irus calculosus se hætenus obtulisset, aut nisi la-  
 “ mentabile Regis Henrici fatum recens nobis eam ansam  
 “ de manibus extorsisset, qui quatuor aut si opus foret plu-  
 “ ribus suspendio adjudicatis reis vitam me impetrante in-  
 “ dulserat, si ab eo opere nostro sospites evasissent. Sed  
 “ hic prætermitti nolui, quod ad implendam vesicam attinet  
 “ decocta caloris esse debere suavis. Nam ut inquit Hip-  
 “ pocrates aphor. 20. lib. 5. frigidum ulceribus infestum,  
 “ quæ vix unquam à vesica calculosa absunt: ob idque  
 “ eam tunc flatu distendi nolim, ut quibusdam placet, tum  
 “ ne frigore algeat, tum verò ne primo quoque novaculæ  
 “ ictu sauciata vesica, ventus evolet. Tunc enim flacces-  
 “ cente promptius, quam si humore injecto aut lotio ten-  
 “ deretur vesica, accideret ut ea mox incisa reciperet se con-  
 “ festim sub os pubis, ubi prius latebat, & ita facile ac tu-  
 “ tò operandi occasionem præriperet. Totus enim cardo  
 “ securitatis in eo vertitur, ut ejus inde emotæ globus quam-  
 “ altissime eminere potest, sursum promoveatur. Quod  
 “ non alio quam uno ex supradictis tribus modis artificio  
 “ fieri



“ fieri posse arbitror, Qui melius, facilius, compendiosi-  
 “ us & tutius commentari ad hoc quidpiam poterit, id bona  
 “ fortuna & sine invidia ad publicam utilitatem faciat opto.



## A P P E N D I X.

“ **A**TTAMEN si nullo istorum modorum vesicam impleri  
 “ posse cuiquam videretur, quia nempe talia instru-  
 “ menta artifex non habet, aut habere non potest, vel trac-  
 “ tare nescit, aut verò quia æger ea pati non sustinet; de-  
 “ speranda tamen non est hæc hypogastrica cystotome, sed  
 “ hoc modo facilior procedet. Sinatur igitur vesica lotio  
 “ quam fieri potest plurimo impleri, ligato modice (ut dic-  
 “ tum est) pene. Deinde figuretur æger ut moris est, &  
 “ proxime os pubis trium plus minus digitorum longitudine  
 “ sursum versus cutis, adepsque, & media muscutorum rec-  
 “ torum regio caute secetur, sic ut ea parte patente, & in-  
 “ testinis (si qua ibi apparebunt) dispulsis vesica tunc in ima  
 “ sui parte anteriori secetur. Tunc lotio per plagam effu-  
 “ so, digiti duo (index & medius) intra podicem viris, sed  
 “ in pudendum foeminis inferentur, qui calculum mox illis  
 “ occursum offendentes, illum inferne sursum ad pecti-  
 “ nem valde ac valide submovebunt. Tunc nullo negotio  
 “ vel sine ferramentis lapis aut unus, aut plures (digitis sub-  
 “ tus protrudentibus) alterius manus digitis eximentur.  
 “ Talis calculi ad epigastrium adductio digitorum ministerio  
 “ facta



“ facta, longè facilior, & ægroto tolerabilior est, ejusdem ad  
 “ perinæum detrusione, qua vulgares cystotomi utuntur. Nam  
 “ promptius digitis percunctantis calculus se offeret, & fa-  
 “ cilius ab inferna parte sursum trudi versus pubem sic po-  
 “ terit, quam in Guidoniana operatione à superiore & re-  
 “ motiore à digitis parte sursum perquiri, præhendi, & inde  
 “ ad perinæum ægrè deprimi valeat. Hoc in quodam Briæ  
 “ viculo factum recenter didici à quodam, qui meæ scripti-  
 “ oni credulus id foelicissime ausus est; quo ne me confer-  
 “ rem hætenus, itinerum pericula obstiterunt, quibus cessan-  
 “ tibus, quid ibi contigerit observandum, publicè edere non  
 “ gravabor. Atqui is sector de implenda lotio aut aliter  
 “ vesica non dicitur fuisse sollicitus: sic ut inde appareat mi-  
 “ nus periculi in eo opere haberi opinione vulgari. Quod  
 “ si digiti operatoris breviores sint pro calculosi corpore,  
 “ quàm ut submovendo sursum ad pectinem lapidi sufficiant,  
 “ factitiis ex corio cocto (*Cuir boüilly* vocant) aut argento  
 “ uti poterit, in quos cavos arcte, ac firmiter suos ipsius in-  
 “ feret, & aptabit; quo tamen is opus non habuit: Cæ-  
 “ tera procedent ut suprâ.





Had a Copy of the following most rare and antient *Thesis*, lately sent me from *Paris*, by that most excellent *Anatomist*, Dr. *Winslow*, one of the Members of the Royal Academy of Sciences; which I dont doubt will be acceptable to the curious Reader.

## QUÆSTIO MEDICA.

Quodlibetaneis Disputationibus manè discutienda in Scholis Medicorum die Jovis 13<sup>o</sup> Decembris 1635.  
M. NIC. PIETREO M. D. Moderatore.

An, ad extrahendum Calculum, diffecanda  
ad Pubem Vesica?

*CALCULUS* qui vesicam diris divexat cruciatibus, ea dissecta quamprimum eximendus est, omni ætate, quavis anni tempestate, posthabitâ etiam Cœli ratione. Optandum ut atteri & comminui ille posset, atque urinæ effluentis impetu exoneretur: at cum nihil extat, quod id præstare valeat, una vesicæ Sectio calculo laboranti opitulari & subvenire potest. Propterea Dei hominum salutis studiosissimi, singulari consilio, uni omnium animantium



*mantium homini, ex alvi sinu extat vesica; & tum superiore tum inferiore sui parte quasi foras prodit: ut ita exposita facile diffecari potest in hominis solatium.*

*Homini duntaxat aperta est vesica, Peritonæo eoque duplicato quasi sacculo concluditur; unde cæteris visceribus illæsis, abdominis etiam cavo integro & intacto, cæditutò in pubem potest. Mediâ sui parte demissâ subter Pubis ossa, cervice suâ Perinæum attingit, fundo vero, ad Pubem imam ventris partem, elato, ea ipsa Pubis ossa superat digitos ferè tres, ut Cathetere paululum incurvâ attolli possit in Pubem ad Sectionem æquè commodè ac in Perinæo. Venis, ab Hypogastrico prodeuntibus perfusa est, plurimis, ut licet substantia omninò membranosa sit, cæsa tamen coeat facile & sanescat, non cervice potius quam aliâ quâvis sui parte, nimirum sanguine ad quasque divisas illius partes peræquè appellente easque glutini instar connectente, præter adipem plurimum qui privatâ & suâ consistentiâ non partis cujusvis frigore concrescit. Obtenduntur Vesicæ, tum tendines membranosi muscutorum Abdominis, tum Pyramidales muscoli, qui ad ejus fundum coeunt ut imâ suâ parte discreti, quasi designant & notant sectionis locum, si fortè diffecanda in Pubem sit Vesica.*

*Diffecandæ ad Pubem vesicæ & ex eâ calculi eximendi, ratio perfacilis est, minimeque operosa: Chirurghi*



*rurgi manus in id erudita, suis pollens viribus hoc opus omne administrat & peragit.*

*Ægro supino jacente, diductis cruribus, eisque vinculo devinctis, Cathetere leviter ab imâ inflexâ & aversâ sui parte eâque incurvâ, attollitur vesica, & cultello exactâ acie disseccatur ad fundum usque amplo & patente vulnere; tum amovetur Catheter, & chirurgi manus alternis digitis quasi oculatis in vulnus inditis, lustrantur vesicæ regiones omnes, & deprehensus calculus nullo negotio properè & celeriter extrahitur. Si vesicæ ille adhæreat, eliso digitis glutine, nullâ vi avellitur; quin si enata membrana sinum vesicæ faciat geminum, & calculum contineat, ea tenui forcipis ictu discissa, membrana digitis etiam educitur, atque hac arte nec divellitur discerpiturve vesica, nec omnino aut minimum contundetur, quod in vulneribus vesicæ potissimum est. Discissa tantum vesica levioris momenti vulnus habetur & est. In urinæ angustiis quotusquisque dissectus fuit nullo vitæ discrimine? At cum vulnere si collisa fuerit vesica deterius jam vulnus est & sæpius læthale. Ut vesicæ casæ Chirurghi calculi extractionem molientis præcipua laus sit, non solum curare ut expedita sit sectio & dolore minimo peragatur, sed imprimis studere ut nullo periculo, nullo vesicæ damno, calculus educatur; geminum illud est, alterum dilaceratio, alterum contusio: alterutrum vel utrumque si affuerit, consequetur inflammatio brevi extinctura tenuem vesicæ calorem. Vesica ad Pubem incisa, si plu-*



*res subsint calculi, omnes extrahentur, nec ullus superesse poterit. Sanguinis grumi qui dum morantur gravissimos invehunt affectus, una cum urinâ per ductum urinarium facile elabentur: Vulnus urinâ non praeluetur, quod ad vesicæ discissæ unionem accelerandam facit plurimum, id vero subjectum oculis est, ut & illius & vesicæ vulneratæ Chyrurgo omnis explorata futura sit ratio.*

*Liberabitur æger tubulo illo qui in vulnus quamprimum immitti solet, turandâ etiam omni praelongâ quæ duo cum adhibentur dolorem movent non levem; Diathesin inflammatoriam foveant; quietem ferè omnem adimunt: nec sordebit illâ immundâ illuvie, namque & alvi onus pelvi & urina matulâ commodè excipietur. licebit & mutare situm modoque in dextrum modo in sinistrum latus, gratâ vice decumbere. Uno verbo curatio longè facilior, & certior multò sanationis spes erit.*

*Ergo, ad extrahendum calculum disseccanda  
ad Pubem Vesica.*

*Reponebat Lutetiæ, Petrus le Mercier Castrothesdorie,  
A. R. S. H. 1635.*

*Domini*



*Domini Doctores Disputaturi,**M. Petrus Y'Velin.**M. Franc. le Vignon.**M. Petrus Richer.**M. Joannes du Cledat.**M. Mathurin Denyan.**M. Claud. Quiquebeus.**M. Claud. Gervais.**M. Franc. Gaenout.**M. Joannes Morlet.*

This very *Thesis* is mention'd in the fourth Century of *Bartholius's* Epistles, in a Letter from *Guido Patin*, dated at *Paris*, in the Year 1662. “ *De Secanda ad*  
 “ *Pubem Vesica, Thesin composuit in Scholis nostris olim*  
 “ *agitata, Vir maximus ac insignis doctrinæ, Mag. Ni-*  
 “ *colaus Pietreus, quam veluti Vitiosam & multis nævis*  
 “ *ac erroribus Anatomicis refertam graviter improbabat;*  
 “ *Jo. Riolanus, Pietrei ex sorore Nepos.*

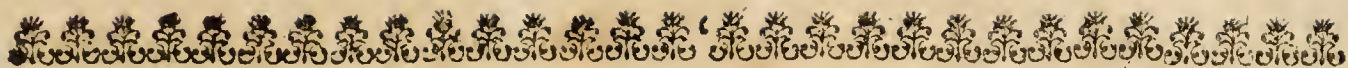
Whence it is evident, that it's no new Thing for some Sort of People vigorously and zealously to oppose all Innovations in Surgery, as well as in——— though never so much more rational and advantageous to Mankind.



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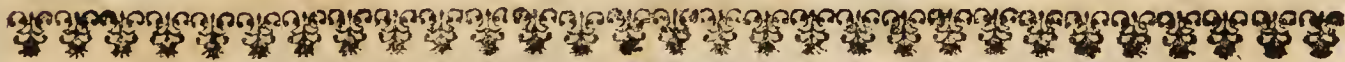


#### ERRATA.

**P**AGE 6. line 3. ? p. 10. last l. read *recovered*. p. 14. dele, s. p. 15. l. 19. r. *Fig. 11.* p. 40. l. 10. r. *medendum*. l. 23. r. *sauciatum*. p. 41. l. 7. r. *A. T.* p. 42. l. 17. r. *Amyand.* p. 49. l. 3. r. *are to hold the Ossa Iliæ.* p. 50. l. 3. r. *Syringe.* p. 55. l. 17. r. *Tab. 5.* p. 63. l. 8. r. *Chirurgorum.* p. 67. l. 20. r. *ever.* p. 68. l. 7. dele *of.* p. 73. l. 13. r. *Marianus.* p. 74. l. 6. r. *inposterum.* p. 124. l. 9. r. *tueundâ.*

#### ADVERTISEMENT.

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Tab. 2.

Fig. 2.

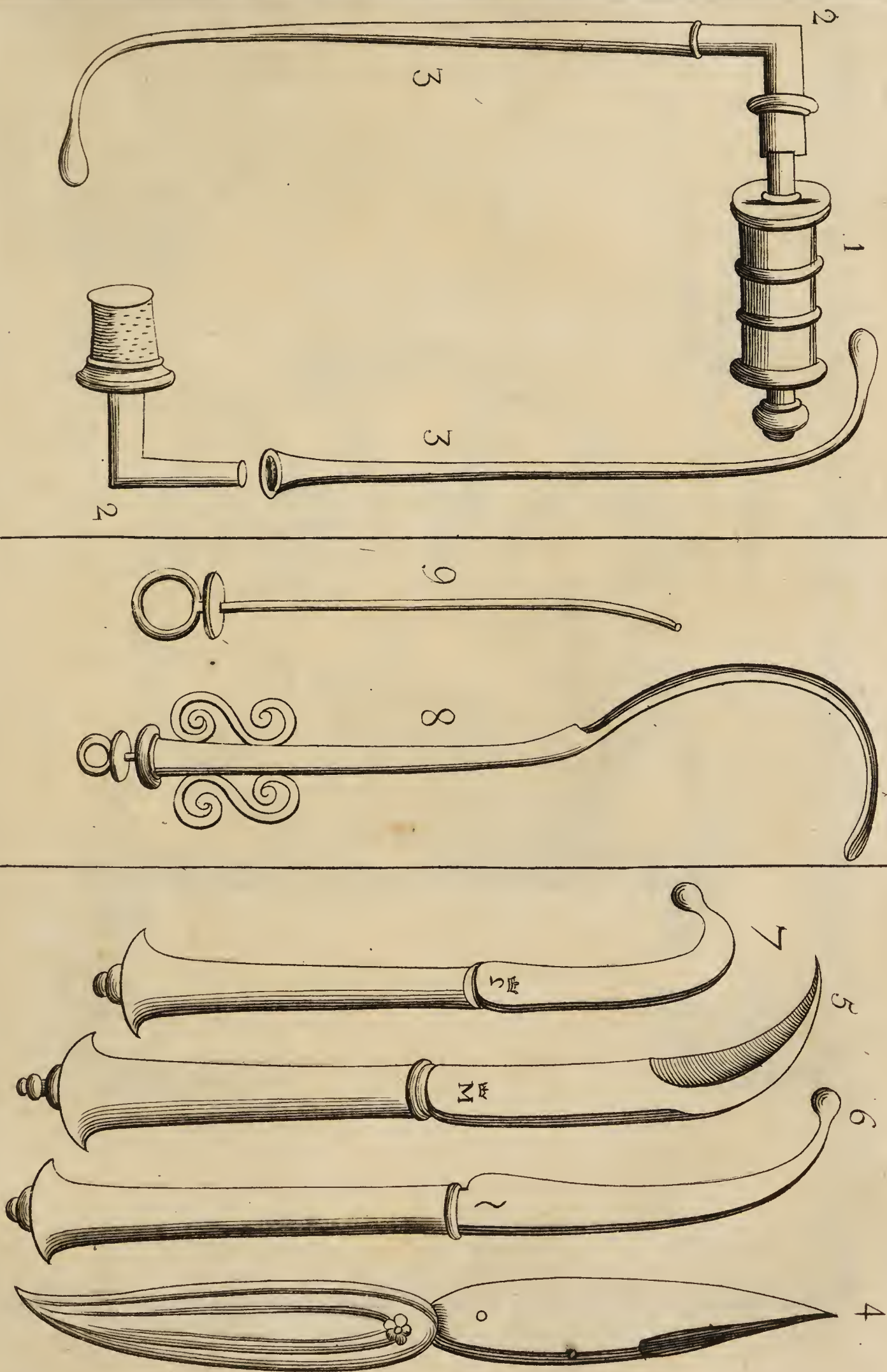




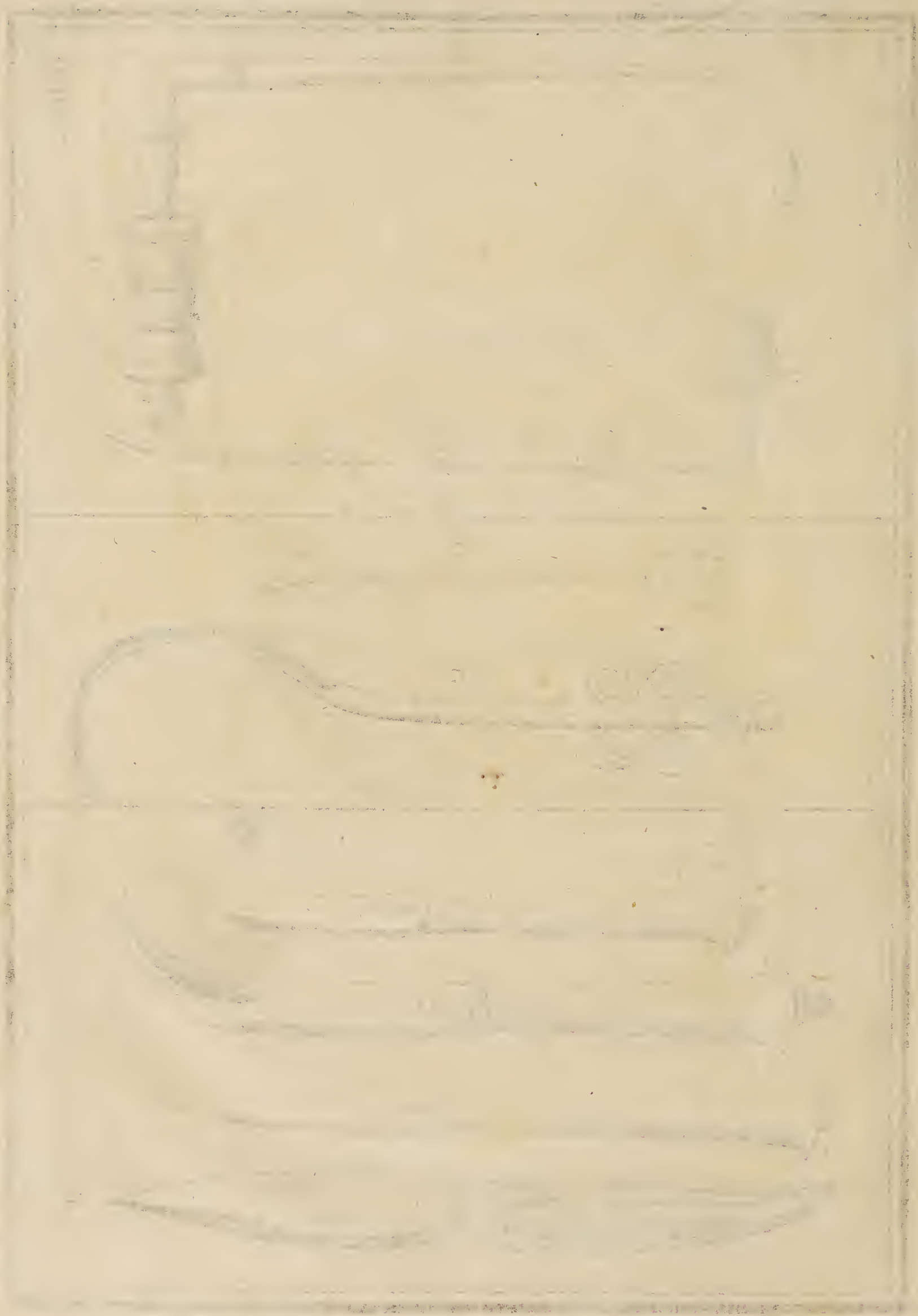




Tab. II.

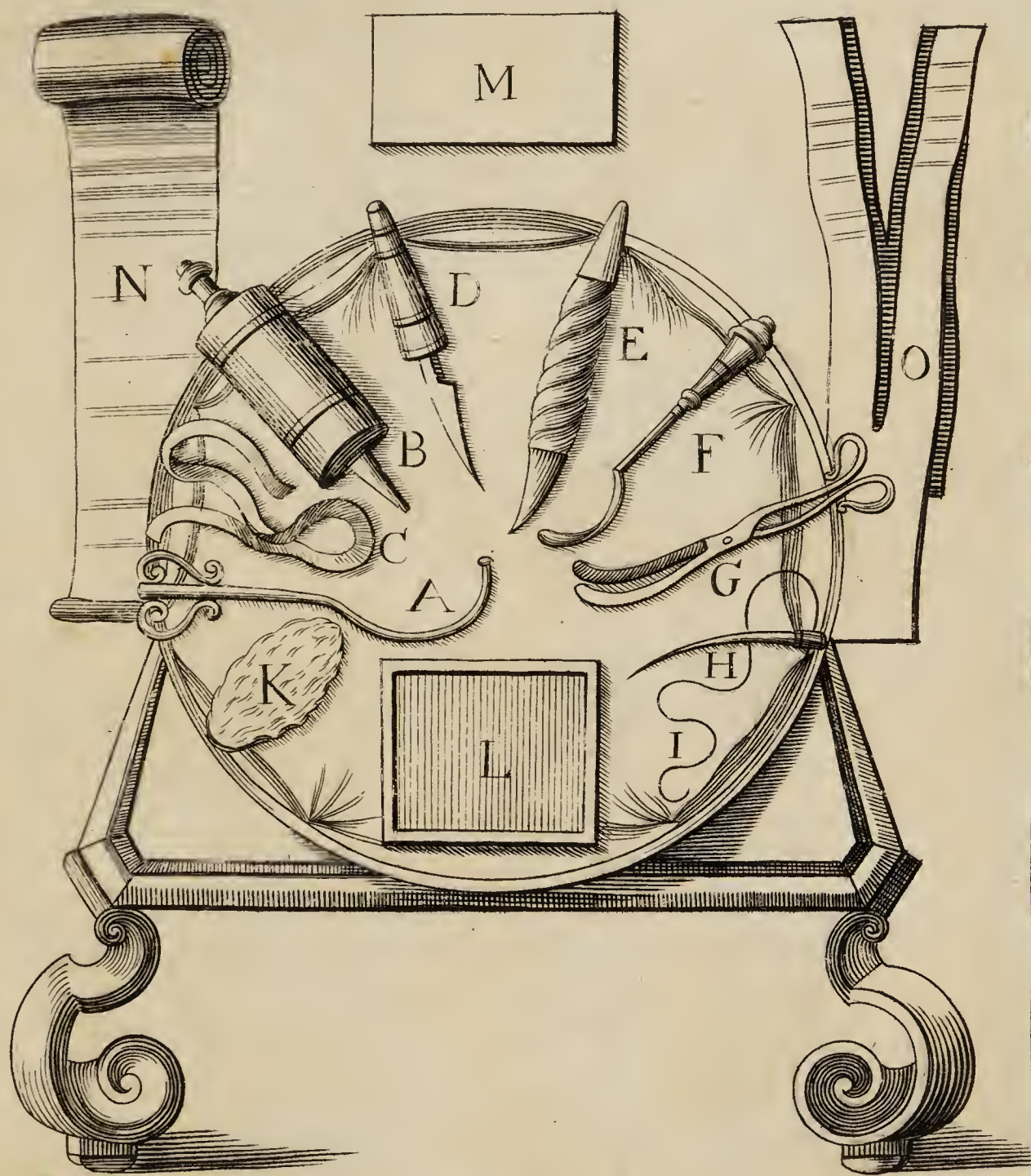








Tab. III.









Tab. IV.

















